September 1980

NASA
National Aeronautics and Space Administration

SPACE TRANSPORTATION SYSTEM
PUBLIC AFFAIRS PLAN

FIRST SPACE SHUTTLE MISSION STS-1

National Aeronautics and Space Administration

Space Transportation Systems

Public Affairs Plan

First Space Shuttle Mission

STS-1

September 1980

APPROVED

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PURPOSE

The purpose of this document is to provide a comprehensive, Agency-wide implementation plan for all Public Affairs activities associated with STS-1, the first Space Shuttle orbital flight test, including the Mission Verification Test and Simulation five to six weeks prior to the flight.

SITUATION

The final phase of Space Shuttle development will begin with the first orbital flight test (STS-1). It will be man's first attempt to launch a winged vehicle into space, test complex machinery and systems in orbit, and return to Earth, landing like an airplane.

The Space Shuttle will be launched from the Kennedy Space Center in Florida, be controlled while in flight from the Johnson Space Center in Texas and will land at the Dryden Flight Research Center in California.

This flight will signify the return of Americans into space after an absence of over five years. World attention will once again focus on the United States' manned space program.

The first Shuttle flight will require the most extensive and complex Public Affairs program ever attempted by NASA, involving not only new, but entirely different practices, procedures and activities. Public Affairs operations will be conducted simultaneously at four widely separated locations, with major guest operations required at launch and landing sites at opposite ends of the country within a three day period.

While the first Shuttle test flight necessitates that the scope of Public Affairs activities be broadened considerably beyond earlier manned flight programs, the Agency enters the Shuttle era with substantially reduced Public Affairs resources. It has been recognized in the planning process that Public Affairs activities for early Shuttle flights cannot be supported solely by the NASA Centers directly involved (JSC, MSFC, KSC and DFRC). The NASA Administrator called this situation to the attention of Headquarters Associate Administrators and all Center Directors in a letter dated March 9, 1979, and asked for the Agency-wide support and assistance necessary to implement this plan. (See Appendix A).

POLICY

The planning in this document is based upon policy set forth in the Space Act of 1958, which requires that NASA "provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof...." as a function of the Administration.

In carrying out this basic dissemination policy, the following principles will apply:

- Information will be released by every practicable and appropriate means of communication consistent with the prerequisites of veracity, authenticity and technical accuracy.

- Information will be released without protective arrangement or any prior understanding regarding exclusive rights in authorship or publication in any form.

- Information will be released in real time, on the record, for attribution, without delay for any purpose other than verification.

- Information will not be withheld to protect the government or any individual from criticism or embarrassment.

- Information will be withheld when disclosure would adversely affect national security, infringe the provisions of the Privacy Act or violate NASA Management Instruction 8610xx regarding private voice communication from the crew while in flight.

POLICY/PLANNING ORGANIZATION

The STS-1 Public Affairs Policy/Planning Organization consists of a Policy Group composed of senior NASA Headquarters Management chaired by the Associate Administrator for External Relations; a Steering Group, composed of the PAO for the Office of Space Transportation Systems and the KSC, JSC, MSFC and DFRC PAO's, and chaired by the Deputy Director, HQ Public Affairs; and five Working Groups composed of Headquarters and Center Public Affairs Personnel (see Appendix B for detailed organization and personnel assignments).

OPERATIONAL ORGANIZATION

The Director, Public Affairs Division, NASA Headquarters, is responsible for overall NASA Public Affairs and the execution of the STS-1 Public Affairs Plan.

The Deputy Director, Public Affairs Division, assists the Director and assumes full authority for the execution of this plan in the absence of the Director.

A staff of three Institutional Chiefs assists the Director of Public Affairs in the management of Media Services, Public Services and Education and Community Services.

The Public Affairs Officer, Office of Space Transportation Systems, David Garrett, is designated STS-1 Operations Manager with responsibility for the implementation of this plan.

The following NASA Headquarters personnel are assigned the STS-1 functional responsibilities:

News Operations	- Miles Waggoner
Photography	- Les Gaver
Telecommunications	- Robert Shafer
Protocol	- Gene Marianetti
Education	- Bill Nixon

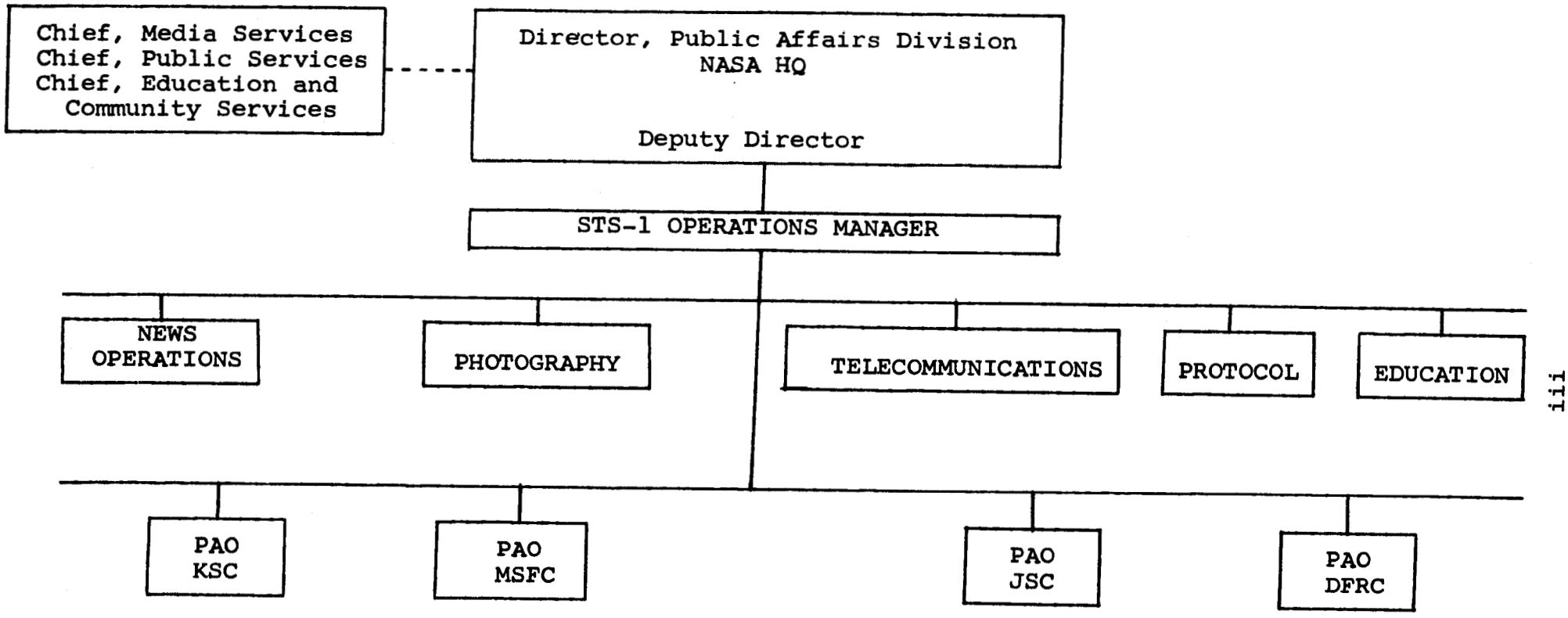
The following Public Affairs Officers are responsible for STS-1 operations at their respective Centers:

KSC	-Charles Hollinshead
MSFC	-Joe Jones
JSC	-Hal Stall
DFRC	-Ralph Jackson
WSMR	-Larry King

(see next page for organization chart)

STS-1 PUBLIC AFFAIRS

OPERATIONAL ORGANIZATION



PLAN ORGANIZATION

This plan is organized into five major sections: News Operations, Photography, Telecommunications, Protocol, and Education. As with any complex operation, the sections are interrelated and contain numerous cross references.

1.0 NEWS OPERATIONS

1.1 POLICY

NASA's Public Affairs Division will provide to the news media to the fullest extent possible in real time all information and services regarding the Mission Verification Test and the prelaunch, launch, flight, landing and immediate postlaunch activities of the first Shuttle mission, Space Transportation System 1 (STS-1). This will include historical background, hardware and mission events.

1.2 IMPLEMENTATION

Shuttle news centers will be established at Kennedy Space Center, Fla.; Johnson Space Center, Houston; the Dryden Flight Research Center, Edwards, Calif., and the White Sands Missile Range, N.M.

Kennedy will be the chief point of contact for information for the launch, Johnson for the flight, and Dryden or White Sands for landing. Marshall will be a major participant through representatives at the other centers. Because this is a short mission, many of the newsmen are expected to start coverage at Kennedy and go directly to Dryden. Most large news organizations will maintain representatives at all Shuttle news centers.

The Shuttle news centers at Kennedy, Johnson, and Dryden will provide the following services:

—an accreditation desk to check the credentials of media related attendees and to issue identifying badges;

—query desks to answer mission related questions and to provide all pertinent information and support to accredited media;

—post bulletins and make announcements;

—hold press briefings;

—arrange interviews and tours;

—provide to the media transcripts of briefings, mission commentary and air-to-ground as available;

—distribute photographs and establish TV services. (See photo section and telecommunications section).

—A Shuttle News Reference book will be published to provide generic information regarding the Space Transportation System, and press kits will be published to provide information about each activity.

Provisions will be made for a minimum news center as White Sands under the assumption that a nominal mission will land at Dryden. In the event of an abort-once-around or the decision for an end-of-mission at White Sands, a full staff will be moved there from Dryden.

A communications system will connect the news centers so that they all share in real time as much as possible all information regarding the mission. This includes an up-to-date accreditation list, mission activity, and an efficient coordination of news-oriented activities. To this end, a dedicated public affairs coordination phone line will be set up linking the involved centers and Headquarters (see also the telecommunications section); a copy facsimile network will link all involved centers and Headquarters.

Key to the functioning of the information system is a network of word processers and communications lines linking the involved centers, Headquarters, and a central computer facility at Johnson Space Center dedicated to public affairs.

All participating installations will have access to the central computer which will contain all pertinent information, both historical and that which develops as the mission progresses.

The computer will also handle press accreditations, TV scheduling, guest operations, transcripts, and general communications.

1.3 ACCREDITATION

In order to serve a large number of bona fide news media with limited facilities, an accreditation procedure will be instituted. News media are defined as personnel involved in the gathering, writing, editing, and researching of articles for publications for sale or with controlled circulation, movies, radio and television and its technical production, and free-lance writers with contracts or acceptable evidence of their professional status. Non-editorial personnel (management, advertising, etc.) will not be accommodated at the working press facilities.

Requests for accreditation must be received on organization letterhead and signed by the assigning editor. Electronic media must supply the names of all technicians and their assignments. No blanket accreditation will be made for technical crews.

College news media will be limited to two accreditations.

Philatelic publications must meet the criteria of general publications or be national publications of a recognized philatelic organization. They will be limited to one reporter and one photographer. The request must be on letterhead with a copy of the publication attached. Newsletters of local clubs will not be accepted.

No special provision for press dependents will be made, except at Kennedy (see page 9).

1.3.1 Accreditation procedures

Accreditation will be managed from Headquarters. A letter will be sent to the full public information mailing list 90 days prior to the first reasonably firm launch date stating accreditation procedures and guidelines.

The accreditation letter will direct all replies to Headquarters, where a master list will be maintained. Centers receiving requests for accreditation will forward them to Headquarters. The master list will be maintained in the computer at Houston. The system used will allow random input of data and produce an up-to-date alphabetized list.

The list will be provided to the involved news centers when accreditation begins on a weekly basis and on a daily basis when the news centers open.

Five working days before launch, the master file and update function will move to the Kennedy Space Center and remain there through launch.

After the launch, the master file and update function will return to Headquarters.

Letters will be sent promptly acknowledging or denying accreditation requests. The acceptance letters will include the Space Shuttle News Reference, information concerning news center operations, living accommodations and maps. Letters denying accreditation will state the reason for the denial.

The accreditation will serve for the flight readiness firing and the first manned orbital flight. New accreditation will be required for each mission. Newsmen will be asked to indicate which center(s) they plan to attend.

1.4 BADGING

Admittance to the news centers and press sites will be by badge only. There will be four basic categories of media-related badges: working press, contractor public relations personnel, radio-TV technicians, and NASA public affairs. The electronic technicians' badges will be good only for the event and location for which they are issued. (A sample of a badge is attached).

Contractor badges will be limited to five for working public relations officers for prime contractors and two for subcontractors. None will be issued for guests.

1.5 NEWS REFERENCE

A comprehensive Shuttle News Reference will be published to serve throughout the orbital flight tests. It will cover hardware, facilities, and organizational responsibilities. Format will be loose-leaf, and updates and corrections will be issued as needed.

The Shuttle News Reference will be printed in black and white only, with graphics and illustrations as required.

Headquarters will publish the News Reference in FY 1980 for distribution to the working press.

Printing and distribution of a soft-bound News Reference by the centers to non-media users will be permitted within center funding limits, but no general distribution will be made. The document will be made available by NASA to the Government Printing Office for possible sale to the public.

Responsibility for coordinating the preparation of the material to be included in the News Reference is assigned to Johnson Space Center. Responsibility for the coordination of changes and preparation of replacement pages is assigned to the public affairs officer for the Office of Space Transportation Systems.

Headquarters Public Information Services will fund the printing and initial distribution of the News Reference. Distribution is as follows: Kennedy —10,000; Johnson — 7,500; Dryden —5,000; Marshall — 2,000; Headquarters — 5,500. Other NASA centers will be supplied 50 each from the Headquarters allotment.

1.6 PRESS KITS

A press kit will be released 10 days prior to the flight readiness firing and 20 working days prior to the first manned orbital flight test. The first manned orbital flight test press kit will be mission specific and will contain an index, a mission profile, a description of launch preparation and major events as scheduled, flight data, principal mission personnel and crew biographies, payload information, and TV schedule, etc. Generic vehicle and hardware information will be confined to the News Reference.

Preparation of the press kit is the responsibility of the public affairs officer for Space Transportation Systems. Headquarters will produce, print and distribute 10,000 press kits. Distribution will be to the accreditation list and to the mission centers. Preparation of the material will be assigned to the various centers as appropriate. For example, the Kennedy Space Center will provide the section on launch preparation; Johnson Space Center will prepare the mission profile, flight data, mission director and crew biographies; Dryden Flight Research Center will prepare landing preparations.

Specific deadlines will be given at the time the press kit assignments are made, but in general, all basic material will be required at Headquarters 40 work days prior to the scheduled launch days.

1.7 MISSION COMMENTARY

Real-time oral reports on the course of the mission will be provided to Public Affairs personnel and the news media by knowledgeable public information specialists from the start of launch countdown through orbiter safing at the end of the mission.

Depending on the mission phase, this commentary will range from periodic status reports to running accounts of mission operations. Prior to liftoff, commentary will be the only real time source of information on the conduct and progress of the countdown. After liftoff, commentary combined with air/ground communications will be the principal source of authoritative information about spacecraft maneuvers, systems status, crew activities, experiment operations and management actions.

The commentators will prepare for their STS-1 assignments with the flight control teams which simulate each phase of the mission in connection with training exercises for the crew and operational personnel.

Each commentator will become a knowledgeable source of official information, an expert thoroughly familiar with mission plans and procedures. During the flight, the role of the commentators will be to facilitate a continuing flow of information to the media, in real time, as the flight progresses. The commentators will provide a service to the media, at the level of detail that requires, but they will not attempt to develop a narrative description and explanation of mission events suitable for general public audiences which are completely unfamiliar with the flight plan.

Real-time release of all communication between flight controllers and the crew will take precedence over all other sources of information available to the commentators, so they will speak only when matters of substances require clarification, interpretation and explanation.

The style of the commentary will be deliberate, matter-of-fact and unemotional. Commentators will speak in the third person, using the active voice in simple declarative sentences devoid of unnecessary modifiers and dramatic locutions.

As they introduce, discuss and summarize mission events, commentators will tell what they know but they will not speculate or otherwise state their own opinions. The only judgments they will express or repeat will be those of individuals who have direct responsibility for the conduct of STS-1 operational activities.

Management of the production, coordination, distribution and release of mission commentary through the PAO Audio Network are discussed in detail in the telecommunications section of this plan.

1.8 BROADCAST NEWS SERVICE

The NASA Broadcast News Service will provide up-to-date mission status reports at frequent intervals during the Mission Verification Test and the STS-1 mission. The service will be in a format designed especially for radio stations, but the reports can be used by television stations, visitor information centers, planetariums, and private individuals.

Broadcast News Service operations will be located at the Kennedy, Johnson and Dryden centers. In the event of a landing site change to White Sands Missile Range, the Dryden unit will be moved there.

A custom designed and built Broadcast News Service unit will be installed at the three field centers and also at NASA Headquarters.

The status reports, up to 60 seconds long, will be written and produced by a public information specialist, and may contain actualities from mission air-to-ground or from mission commentary.

During missions the reports will be coordinated between centers, allowing for uniform use of reports by all centers and Headquarters.

Kennedy will provide pre-launch reports from T-5. Johnson will originate reports during the flight. Landing and post-landing reports will originate from Dryden or Johnson.

1.9 POOL ARRANGEMENTS

A media pool will be formed at the discretion of the Director of Public Affairs or his designee to cover events that do not in his judgment permit full press corps coverage. The pool will consist of one representative from each segment of the media: television, radio, the wire services, the daily press, and periodicals. All material developed by the pool members will be freely available to all media.

1.10 NEWS CENTER OPERATIONS

Shuttle news centers will be established at the Kennedy Space Center, Johnson Space Center, the Dryden Flight Research Center, and White Sands Missile Range. The purpose of the Shuttle news centers is to provide a timely and accurate flow of information about the mission to the news media.

To assure the above, each news center will provide a facility for holding press briefings. The facility will provide adequate room and seating for at least 200 press, a public address system, projectors and screens for movies, slides and view graphs (Telecommunications will be provided as detailed in the telecommunications section).

Query desks will be established and manned to answer individual queries from the press. Computer terminals will be used at the query desks and will access a central computer file of information regarding the mission. The computer will contain background material, and will be updated as information is developed. The terminals will also link the participating centers and Headquarters.

Tour and interview desks will be established to arrange working press tours where this is necessary and desirable and to arrange interviews for the press with program officials.

A press working area will be furnished with tables.

Pay phones will be installed, and newsmen may arrange for private phones at their desks. Desks are assigned on a first-come, first-served basis. The procedures for this will be stated in the accreditation letter.

Monitors for the NASA audio and video networks will be installed in Headquarters and the centers. Provision for direct access is detailed in the telecommunications section.

1.10.1 Foreign Press

The Foreign Press Center, Washington, D.C., will be asked to provide asistance to the foreign media at the Kennedy Space Center and the Dryden Flight Research Center. Space will be made available for members of their staff at both Kennedy and Dryden. The Foreign Press Center's office will be in operation five days before launch. The Public Affairs Officer for International Affairs is responsible for coordination with the Foreign Press Center.

1.11 POSTFLIGHT NEWS OPERATIONS

1.11.1 Crew Egress from Orbiter

Before entering the transfer van, crewmen will pause for photographs, and each will make a brief statement at microphones. There will be no Q & A. A news pool will be required because of access restrictions in the orbiter area. Crew time required is five minutes.

1.11.2 Landing + 3 Hours

The crew will not participate in the postlanding briefing at Dryden by senior program officials. Suggested participants are Dr. Robert A. Frosch, John F. Yardley, Robert F. Thompson, and Donald K. Slayton. The entry flight director will participate from Johnson. Two-way audio communications will be available in Johnson's Building 2 briefing room and Dryden auditorium. Time should be limited to 60 minutes, with approximately 45 minutes on Q & A.

1.11.3 Landing + (TBD) Hours

Crew arrival at Ellington Air Force Base. Dr. C. C. Kraft, Jr., or his designee, and each of the crewmen should make brief statement at microphones. There will be photo coverage, but no Q & A. Crew time required is 15 minutes. Johnson Public Services Branch is responsible for transporting crewmen's families.

1.11.4 Landing + 3 to 7 Days

The crew news conference at Johnson will follow the management debriefing as soon as possible. Only the two crewmen will participate. They will describe the mission and narrate selected motion picture footage and slides before answering questions. Crew time required is 90 minutes. The conference will conclude with a 5-to-10-minute photo session and the crew will return to the debriefing schedule.

1.11.5 Landing + 5 days

Johnson Public Information Branch will draft a news release based on the five-day mission report. Quick reviews by all approving elements are required for timely release.

1.11.6 Landing + 30 Days

Johnson will draft a news release based on the final mission report. A copy of the full report will be available in each news center, and copies will be made available to major news organizations on request.

1.11.7 Landing + 10 to 30 Days

Any crew tour will probably occur during this period, following completion of debriefings. Tour plans normally originate at NASA Headquarters, State Department or the White House. Headquarters Public Affairs will be responsible for planning, coordination, staffing assignments, and news releases pertaining to tours and appearances during the immediate postflight period. Field centers will provide support as requested by Headquarters.

Subsequent to the special postmission appearance period established by Headquarters, the STS-1 crew appearance requests will be handled as standard astronaut appearance requests

1.12 KENNEDY SPACE CENTER NEWS CENTER OPERATION

The news center will be located in six trailers at the press site at Launch Complex 39. It will include query desks staffed by public affairs personnel from NASA Headquarters, Johnson, and Marshall and the Department of Defense. Two general query desks also will be manned during normal duty hours.

A contractor desk will be provided in the news area, as well as a contractor information office if space permits without additional expense to the government.

Status reports will be read over the public address system twice daily or as otherwise deemed necessary, then printed and distributed. Data sheets, press conferences notices and information on media activities will be posted, and a recorded phone message system provided.

Headquarters public affairs will coordinate assignments of public information personnel from other field centers to assist in the news center on a scheduled basis.

1.12.1 Hours of Operation

The Kennedy Shuttle News Center will open 30 days prior to the first launch. Hours will be 8-5:00 p.m. Monday through Friday and weekends if required by early influx of media representatives, and will be expanded as news activity dictates. The news center will be open the weekend before launch during regular duty hours, and 24 hours a day from T-1 day through the mission. All Kennedy public information branch personnel will relocate to the news center 30 days before launch.

1.12.2 Preliminary Briefing Schedule

T-3/2 days - Systems press briefing. Content will be determined at T-30.

T-2 days - Astronaut arrival coverage

T-1 days - Pre-Launch press conference.

T+1 hour - Launch Director's post-Launch press conference.

1.12.3 Accreditation

An accreditation desk will be established, supervised by a senior information officer. Two clerks will be assigned from the news center opening until T-5. Four clerks will be assigned during the five days before launch.

The press will be required to register at the desk upon arrival and at that time will pick up their badges which will provide access to the news center and

unescorted access to the press site. The badge will not provide unescorted access to other center areas.

A list of accredited media will be made and distributed daily.

Requests for media dependents must be made in writing and will entitle the dependents to no more than a special viewing area for the launch. Dependents will not have access to the news center or press site at any center.

1.12.4 Commentary

During the Mission Verification Test and other launch preparations, and during launch operations, commentary for the PAO Audio Network will be provided by KSC. The commentator will operate from the PAO Console in Firing Room 1 in the Launch Control center during test, simulation and launch activities. At other times the commentator will operate from positions established for that purpose at the Press Site and News Center.

The commentary will be scheduled as appropriate to the media interest in major events prior to the start of Launch Operations at T-5, and at that time will become the principal means of describing the sequences of operational activities leading to ignition and liftoff.

Commentary will be developed to incorporate voice communication with the crew for real-time release during critical launch operations.

In the event non-nominal situations involving the propulsion system require that the Huntsville Operations Support Center (HOSC) become a principal source of information about conditions affecting mission status, an MSFC commentator will activate a position in HOSC and provide supplementary reports to the JSC commentator as appropriate.

After SRB ignition, responsibility for mission commentary will transfer to the Johnson Space Center.

Management of the production, coordination, distribution and release of the PAO Audio Network are discussed in detail in the telecommunications section of this plan.

1.12.5 Press Site Operations

The press site will be staffed daily from T-14 days through end-of-mission by the communications manager. At T-5 days a clerk will be assigned. Contractor technicians will be on hand in sufficient time to prepare the television and audio equipment for the mission.

Grandstand seats at the press site will be assigned on a first-come basis. Each news organization is limited to one grandstand seat unless a legitimate need can be established for two, which will be the maximum.

Media may make arrangements with the telephone company to have phones installed at their own expense. A limited number of pay phones will be available behind the grandstand.

The press site will be located adjacent to a special guest viewing site and separated from it with ropes. Security guards will be posted at the access bridge linking the two areas to preclude public intrusion into the press site. Escorted press will be permitted into the guest viewing area for photographs and interviews, but guests seated in the bleacher portion of this area may not be interviewed without their express permission.

1.12.6 Pool Positions

Public affairs has been assigned two seats in the Operations Management Room overlooking Firing Room 1. These seats are at consoles where operational command loops can be monitored and are available for news media use if required.

1.12.7 Tours and Interviews

A tour and interview coordinator, under a Kennedy manager, will supervise a group of 25 escorts made up of personnel from other KSC directorates. The 25 escorts would be phased in as needed, beginning with just a few on call when the news center opens. All will be on duty by T-5 days.

Activities to be handled by this section include:

- Regularly scheduled press tours beginning T-10 days
- Interviews
- TV Crew Escorts
- Photographic press tours
- Press dependent tours (T-2 days)
- Sunrise/sunset press photographic sessions
- Press from news center to press site and return
- Pad damage press tour after launch
- Astronaut departure from crew quarters (pool of 30 — see photo section)
- Wildlife press tours at T-2 and T-1 days
- Deploy and recover remote cameras
- Dispatch film and tape for pool operations

The transportation coordinator will also work with this group.

For photo operations, distribution, etc., see photo plan.

1.12.8 Staffing

Chief, Information Operations

News Center Manager

- Query desks - eight public information officers (including one each from Headquarters, Marshall, and Johnson)
- Defense Department desk
- Contractor public relations desk
- Technical liaison from Johnson, Marshall and Kennedy - 1 rep. each

Clerical manager

- 15 clerical personnel to handle secretarial, executive offices, bullpen area, accreditation and reproduction coordination.

(Under the Photo Manager)

- Interviews/tours coordinator
- Dependents' coordinator
- 25 escorts
- Photo distribution
- Transportation representative (supplied by Transportation Office)

Security manager

As arranged by KSC security office Press site manager (administration)

1.13 JOHNSON NEWS CENTER OPERATION

The news center will be located in Building 2. Services will include query and interview desks, contractor desks, and a Department of Defense desk. In addition, Johnson will provide mission commentary and transcripts of the commentary. These will be provided to Kennedy and Dryden.

A working area will be set aside for the news media adjacent to the news center. The working area will consist of ample tables, and media will have access to audio control switch boxes into which they can plug tape recorders. The working area will also have an adequate number of television units which will provide TV feeds from the spacecraft, when scheduled as well as the feed from the mission control center TV cameras. Table assignments will be on a first-come, first-served basis. Media seeking advance table assignments may contact the Johnson news center prior to mission time. Media will be required to make their own arrangements with the local telephone company for phone assignments.

1.13.1 Hours of Operation

The Shuttle news center will be open 8:00 until 4:30 p.m. seven days before launch until launch. Hours will be expanded if news activity warrants. It will be open 24 hours a day from launch through landing.

1.13.2 Preliminary Briefing Schedule

T-30 - Final preflight press conference with prime crew plus related background briefings

T-3 days - Background briefings and press conferences on mission status.

T-0 through end of mission - Three change of shift briefings will be held and others as warranted.

1.13.3 Accreditation

For those not receiving accreditation by mail, accrediting will be done in person at Johnson. A clerk will be assigned for this purpose as well as badging.

Traffic is expected to be light as most media will be accredited by mail and badged at Kennedy or Dryden.

1.13.4 Tours and Interviews

One public affairs person will be assigned to handle interviews. People from outside public affairs will act as escorts to the mission control center.

1.13.5 Commentary

After SRB ignition, responsibility for providing mission commentary to the PAO Audio Network will transfer from KSC to the Johnson Space Center.

During the Flight Operations phase of the mission, the JSC commentator will operate from the PAO Console in the Mission Control Center.

Commentary will be developed to incorporate all air/ground voice communications for real-time release except when major news briefings take precedence or when there is an operational requirement for private communication with the crew.

Air/ground communication not released real-time during major news briefings will be recorded and incorporated in the commentary immediately following those briefings.

The operational requirement for privacy during air/ground communication will be established by the Mission Director in accordance with the provisions of NMI (TBD) STO Voice Communications Policy, and NMI 8610.11, Control of Access to Operational Voice Communication Circuits. The planned exception to the real-time release of all air/ground communication will be revealed and explained by the commentator prior to the private conversation. Unless expressly precluded by the provisions of the NASA Management Issuances cited above, the commentator will provide a summary of the nature of the private conversation without undue delay after the conversation is concluded.

Under nominal conditions, responsibility for mission commentary, will remain with JSC through landing and rollout. During this end-of-mission period, the JSC commentator will be assisted as appropriate by the commentator at DFRC.

Under other than nominal conditions which require a return to the launch site abort and landing, responsibility for the commentary will remain with JSC through landing and rollout and then transfer to KSC after rollout and wheel stop.

Under other than nominal conditions which require a landing at Northrup Strip, responsibility for the commentary will remain at JSC. There will be no commentator at Northrup Strip.

Under nominal conditions which require a landing at Northrup Strip, responsibility for mission commentary will remain with JSC through landing and rollout, assistsed by the commentator at NS, and then transfer to the commentator at NS after wheel stop.

Management of the production, coordination, distribution and release of mission commentary through the PAO Audio Network are discussed in detail in the

telecommunications section of this plan.

1.13.6 Transcriptions

A verbatim transcript of broadcast release network will be produced by Johnson and distributed to Johnson, Kennedy, and Dryden as soon as mechanically possible. These transcripts will be edited only for technical accuracy (spelling, typos, etc). There will be no deletions, additions, comments or amendments.

Since the public affairs transcript is used primarily by news media operating on tight deadlines, it must be printed within two to four hours of its availability.

The transcript production staff will be sized to permit cycling a 15-minute air-ground/commentary tape through a first draft transcript, editing, final typing, final review, printing and delivery to Building 2 within two hours. During peak periods of air-to-ground, such as in high-activity stateside passes, transcript turnaround of up to four hours can be expected.

Change-of-shift briefings may often be given a transcription priority greater than nominal air-to-ground and commentary. Change-of-shift briefings will typically last about 45 minutes. Priority transcription will be completed within two hours. Routine transcription of change-of-shift briefings will be completed in four hours.

Beginning three days before launch, background briefings and press conferences will require transcription. Completed transcripts will be available about four hours after morning briefings and by noon of the following day for afternoon briefings.

A two-shift transcription operation will be required at T-3 days and a three-shift operation will be required from T-1 through end of mission.
The final preflight astronaut news conference, about 30 days before launch, will be transcribed, as will the postflight crew press conference, that will take place within a week after flight

Word processors and and the public affairs communication network will be used to prepare and distribute the transcripts.

1.13.7 Tours and Interviews

An interview desk will be staffed by a public information officer.

1.13.8 Pool Positions

A pool may be formed for coverage from the Mission Operations Control Center and for simulations.

1.13.9 Staffing

Chief, Information Operations

News Center Manager (first shift)

News Center Manager (second shift)

- Query desks — six information officers

- Interview desk - one information officer

- Broadcast News Service - one information officer

- Audio-visual coordinator - one public affairs person

1.13.10 Mission Control Center

Mission commentary — Five public information officers; three assistant directors will be supplied by contractors.

Clerical section — Three secretaries will be assigned as news center assistants and one secretary will be assigned to the accreditation desk. Clerical and transcript support will come from other elements of the center.

1.14 DRYDEN FLIGHT RESEARCH CENTER NEWS CENTER OPERATION

The Shuttle news center will be at the NASA site at Edwards Air Force Base, Calif., and will consist of four separate physical operations: a news center, a working area for the news media, a press site at the landing area, and an auditorium for press briefings.

The news center will house the query desk, a photographic services desk, contractor desks, a Department of Defense desk, and desks for Shuttle field centers.

The working press area will be located close to the news center and will contain tables for the press plus telephone trunk lines so that the news media may contract for telephone service. Television monitors with the NASA audio release will also be located in this facility.

Two separate intercom lines will connect the press working area with the news center.

The auditorium will seat at least 200 news media and will contain the necessary facilities for monitoring all press conferences and briefing originating at the other NASA centers.

If required, the auditorium will be used for working press, as telephones are available. NASA audio and television release distribution will be made from the audio/television trailer located next to the auditorium.

1.14.1 Hours of Operation

Prior to launch, the news center will be manned normal working hours, 7:30 a.m. to 4:00 p.m. Hours will be expanded if news activity warrants. At launch, all facilities will begin 24-hour operations, except the lakebed site, which will operate during daylight hours.

1.14.2 Accreditation

From T-3 until T-1, accreditation will be handled at the NASA Guest Services Center in Lancaster, Calif. At T-1 this operation will be moved to the public affairs office at NASA Dryden.

1.14.3 Preliminary Briefing Schedule

T-1 — Prelanding briefing on landing activities

T+3 — Post landing briefing

Other briefings as required and in coordination with Johnson and Kennedy.

1.14.4 Commentary

During nominal landing operations at Dryden Flight Research Center, the mission commentator at JSC will incorporate supplementary reports from commentators in the DFRC Flight Operations Control Room and at the dry lakebed landing site in the description of landing preparations and landing operations.

After wheel stop, responsibility for mission commentary will transfer to the commentator in the DFRC Flight Operations Control Room, who will continue to incorporate supplementary reports from the commentator at the landing site through crew egress.

Mission commentary will conclude with crew departure from the landing site.

Management of the productiuon, coordination, distribution and release of mission commentary through the PAO Audio Network are discussed in detail in the Telecommunications section of this plan.

1.14.5 Press Site Operations

A press site will be established on the edge of the lakebed approximately one mile from the planned touchdown location. A token fence will be used to prevent news media from closer access. This area is planned primarily for camera and television press who will have to use their own transportation. No telephone lines are available at this location. NASA audio release will be provided and, if possible, NASA television.

1.14.6 Pool Positions

A pool will be formed if an alternate landing strip is selected.

1.14.7 Staffing

Chief, Information Operations

News Center Manager

- Query desks — six public information officers (including one each from Headquarters, Johnson, and Marshall
- Interview desk — one public information officer
- Broadcast News Service — one public information officer
- Commentary - one public information officer
- Accreditation — two clerical
- Contractor public relations desk
- Defense Department representative
- Landing site news operation — two public information officers
- Caravan to Shuttle after landing — one public information officer (from Kennedy.

1.15 Proposed Shuttle News Center Staffing

1.15.1 Kennedy Space Center

Chief, Information Operations	Harris (KSC)
News Center Manager	Young (KSC)
Query desks	Raab (KSC) Kristofferson (KSC) Gordon (JSC) Senstad (HQ) Taylor (MSFC) Fitzpatrick (HQ) Two 2-year appointees (KSC)
Interview desk	To be determined
Mission commentary	Harris (KSC)
Broadcast News Service	To be determined

1.15.2 Johnson Space Center

Chief, Information Operations	McLeaish (JSC)
News Center Manager (first shift)	White (JSC)
News Center Manager (second shift)	Riley (JSC)
Query desks	Redmond (HQ) Marman (HQ) Parker (Langley) Duncan (MSFC) Atchison (HQ) Herring (NSTL)
Interview desk	Mays (JSC)
Audio-visual coordinator	Robbins (JSC)
Commentators	McLeaish (JSC) Riley (JSC) White (JSC) Cywanowicz (JSC) To be hired
Broadcast News Service	To be determined

.15.3 Dryden Flight Research Center

Chief, Information Operations	Jackson (DFRC)
News Center Manager	Kukowski (HQ)
Query desks	Wood (JPL) McMillan (JPL) Becker (JPL) Dundon (contract) Pomeroy (HQ) Gordon (JSC)
Landing site information officers	Miller (ARC) King (ARC)
Caravan public information officer	Young (KSC)
Commentary	To be determined
Broadcast News Service	To be determined
Interview desk	To be determined
Photography coordinator	To be determined

Accreditation letter

NASA is accepting accreditation requests for news media to cover the first manned orbital flight of the Space Shuttle. Launch is scheduled for ___ from Kennedy Space Center, Fla., with mission control from Johnson Space Center, Houston, and landing at the Dryden Flight Research Center, Edwards, Calif., or White Sands Missile Range, N.M., 54 hours later.

The accreditation will also be good for the flight readiness firing at the Kennedy Space Center.

The news center will open at Kennedy at T-30, at Johnson at T-7, and at Dryden at T-7. Decision on the status of White Sands will be made at a later date.

Requests for accreditation must be made by a news executive on company letterhead, clearly indicating the assignment (reporter, photographer, technician, etc.) of each individual. The accreditation will be valid for all news centers.

Requests should be submitted by ___ to:

NASA
Code LFD-10 Accreditation
Washington, D.C. 20546

Please indicate from which location(s) you plan to cover the mission.
Here is a review of the NASA ground rules for newsmen covering the launch:

- NASA can make no travel or housing arrangements.

- Only working newsmen will be accredited at the news centers.

Friends, dependents or relatives not covering the mission will not be accommodated. Special arrangements can be made only at the Kennedy news center where dependents may view the launch from a special dependents' site.

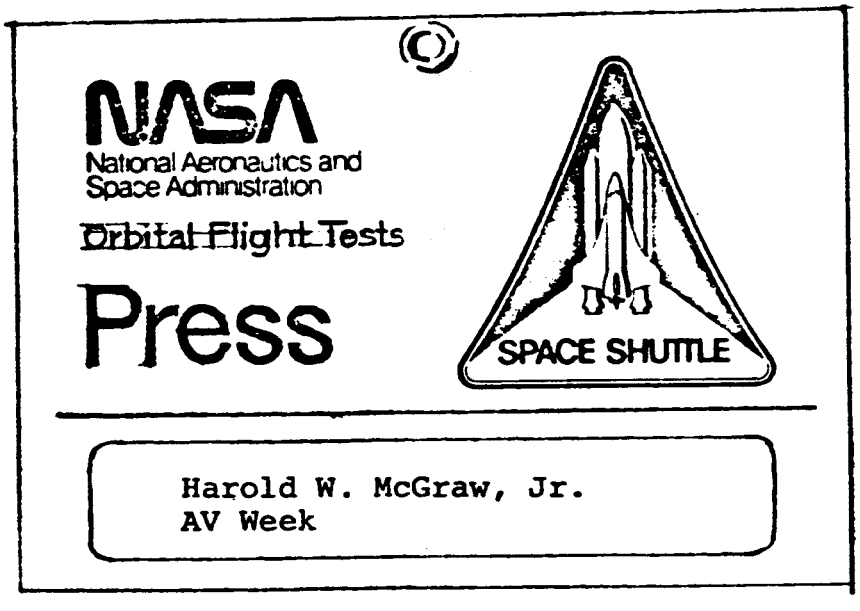
- Philatelic publications must be publications for general sale or publications of national organizations. They are restricted to two representatives each. Newsletters of local clubs do not qualify.

- College news media are limited to two accredited correspondents.

- Parking permits, news room and press site seat assignments will be issued on a first-come, first served basis.

If your accreditation request is approved, you will be mailed a certificate to be presented in person to obtain a news badge at the appropriate news center. If you lose your accreditation certificate, a record that it was issued will be available at each news center.

If you do not hear from your accreditation request by ___, please contact this office so that we may determine whether it was received and what action was taken on it.


NASA
National Aeronautics and
Space Administration
Orbital Flight Tests
Press
SPACE SHUTTLE
Harold W. McGraw, Jr.
AV Week

2.0 PHOTOGRAPHY

2.1 FOREWORD

The Audio Visual Services Section of NASA's Public Affairs Division is responsible for providing a variety of photographic services for media use and historical documentation during the Flight Readiness Firing (FRF) and the first manned orbital flight of the Space Shuttle Columbia, STS-1.

Services include still photographs and motion picture film of significant events during FRF and STS-1, pre-mission photographic documentation and assistance to the news and information media before, during and after the two missions.

The latest technology and state-of-the-art equipment and materials will be used to document the mission.

Photographic documentation during STS-1 will be centered at the Kennedy Space Center, Fla., Johnson Space Center, Houston, Tex., Dryden Flight Research Center, Edwards, Calif., and White Sands Missile Range, N. Mex. (if required). FRF activities will be centered at KSC.

2.2 PHOTOGRAPHIC SERVICES

Each center (KSC, JSC and DFRC) will provide the following services during STS-1 mission (KSC only during FRF):

- "Quick release" still black and white photos for print media and wire services.
- "Quick release" still color prints to press association pools for the print media.
- "Quick release" motion picture film for the TV/Film pool.
- Assistance to major media in camera site location at KSC and DFRC (KSC only for FRF).
- Coordinate media pool operations when needed.
- Distribute pre-mission black and white prints and color transparencies of Space Shuttle activities to media STS-1 only).
- Distribute pre-mission motion picture film of Space Shuttle activities to media (STS-1 only).

2.3 PHOTOGRAPHIC DOCUMENTATION METHODS

Both still and motion picture cameras will be used to document FRF and STS-1 activities.

Two still formats will be used, 6x6 centimeter (2 1/4 square) and 35mm; and two motion picture formats, 16mm and 35mm (standard and high speed) color.

Hand-held, tracker-mounted, fixed-position, helicopter and aircraft-borne camera systems will be deployed at critical sites to cover various mission phases. Remote start cameras will be used where required. In addition to Public Affairs deployed cameras, engineering still and motion picture photography will be used to document certain events.

2.4 PHOTOGRAPHIC DOCUMENTATION RESPONSIBILITIES

At the Kennedy Space Center the PAO contractor, Technicolor Inc., will provide still and motion picture photographic services under the direction of Ed Harrison, KSC Public Affairs Audio Visual Chief. Assignments include preflight preparations, pre-flight astronaut activities, launch of the STS, launch control center, onsite viewing, offsite crowd, long range tracking and solid rocket booster recovery. Processing will be done on site by Technicolor.

Photographic services at the Johnson Space Center will be performed by the on-site contractor, Technicolor, Inc. Bill Robbins, JSC Public Affairs Audio Visual Chief, will supervise the JSC ground photographic activities.

Ground activities include still and motion picture coverage of mission control on a daily basis, still photography of TV transmissions from Columbia and other photo opportunities at JSC during the mission.

Orbital photography aboard the Columbia is the responsibility of the JSC Photographic Documentation Division. On-orbit photography will consist of 35mm still color, 6x6cm still color and 16mm motion picture film. All onboard film (still and motion picture) will be taken from the Orbiter cabin and flown immediately to JSC after the lakebed landing. No onboard film will be processed at DFRC. PAO will select still and motion picture footage for release at JSC on a priority basis. About six prints and 200 feet of film will be released with photo captions and film narrative. The film clip will be video taped for TV use.

At the Dryden Flight Research Center, lakebed photography will be supplied by members of a JSC Photo Documentation Team supervised by Eugene Edmonds, Photographic Documentation Division. Off-lakebed photo services will be supplied by the DFRC Photo Lab., supervised by Larry Montoya, DFRC. Color still and motion picture processing will be done by the Edwards Air Force Base Photo Lab.; black and white processing will be done by the DFRC Photo Lab.

Approach and landing, crew egress, VIP and general public viewing areas, crew debriefing and post landing operations will be covered.

In the event of an abort once around landing at White Sands Missile Range/Northrup Strip or an end of mission landing, lakebed photography would be provided by a JSC documentation crew. U.S. Army Signal Corps photo photographers would provide assistance with off-lakebed photography.

A NASA landing contingency PAO will be on-site at WSMR .

2.5 PRE-MISSION PHOTO ACTIVITIES

Photographic services will commence well in advance of FRF and STS-1 launch day. Photo release will start at T-30 for FRF. Releases will be made from NASA HQ and cognizant field center Public Affairs Audio Visual Offices prior to the

opening of Photo News Offices on T-7 at KSC, JSC and DFRC, HQ Audio Visual will prepare a selection of prelaunch photographs for distribution to the media at each news center. Approximately 25 still photos will be selected, color and black and white, of buildup of the Space Shuttle and crew training activities during the preceding 90-120 day period. Each center will have supply of 8x10 prints and 4x5 color transparencies for distribution to media prior to FRF and STS-1 launch.

KSC, JSC and DFRC will have available a selection of prelaunch TV/Film clips (no sound) and a series of single concept sound on film featurettes for distribution to the media.

2.6 PREMISSION FILM PRODUCTION

KSC, JSC, DFRC, and MSFC are completing a series of prelaunch TV clips for release at T-5 through the Audio Visual Photo News Offices at each Shuttle News Center. They pertain to:

- Orbiter assembly
- STS-1 mission profile
- STS-1 launch aborts
- Orbiter flight computers
- Payload bay door operation
- Orbiter thermal protection system
- Astronaut training
- Astronaut personality
- STS assembly and checkout
- Launch pad safety features
- Solid Rocket Booster (SRB) recovery
- SRB testing
- SRB parachute recovery
- STS refurbishment
- Shuttle ground vibration testing
- Space Shuttle Main testing
- External Tank assembly

Each TV/Film clip will be 100-150 feet in length and be accompanied with a suggested narrative script.

A series of single concept, sound-on-film featurettes will be completed on distribution to the TV/Film media by the Photo News Office at each Shuttle News Center. The Shuttle digest series films are:

- Orbiter Flight - 8-10 min.
- The Orbiter - 8-10 min.
- Missions and Payloads - 10-15 min.
- Space Shuttle Economics - TBD
- Astronaut Training - 8-10 min.
- Flight Simulator - 4-5 min.
- Ground Support - 4-5 min.
- Communications - 4-5 min.
- Propulsion - 4-5 min.
- EVA (tools, tethers suits, etc.) - 8-10 min.

In addition to the above, Aeronautics and Space Reports, profiling the crew (long and short version), a TDRSS film, and a 30-minute Space Shuttle film are in production for distribution to the TV/Film media.

2.7 MEDIA POOL ACTIVITIES

Media pools will be formed where, for reasons of space limitations and safety, only a limited number of the working press will be allowed. A "photographic pool" will consist of three still photographers (AP, UPI and a magazine photographer) and two motion picture photographers (16mm and 35/65mm). This group will accompany pool reporters selected by TV and the writing press. A NASA still and motion picture team will be a part of the pool contingent.

In addition, a pool arrangement will be made to man the press observation booth adjacent to the VIP viewing room at JSC Mission Control (see Public Information Section). Additional pools may be designated when warranted.

Pool activities currently designated are:

- Astronauts leaving crew quarters on morning of FRF and STS-1 launch day

- KSC firing room after a successful FRF and STS-1 launch

- JSC mission control center after successful completion of STS-1 mission

2.8 ACCREDITATION AND BADGING

All news media will be accredited through HQ Public Information Services. Special "Photo Release" accreditation cards will be provided to news organizations to enable one representative to receive "quick-release" color and black and white photographs provided by NASA. "Photo Release" cards will be distributed by the News Center Photo News Offices at KSC, JSC and DFRC. Accreditated media, writers and photographers must reregister at the Photo News Desk at each center to qualify to receive NASA supplied photographs. Additional information on accreditation is in the Public Information Section.

All members of the media are required to be badged for admittance of News Centers, viewing sites and press pool participation. See the Public Information section for details.

2.9 STAFFING ASSIGNMENTS

Les Gaver, Chief, Audio Visual of NASA Headquarters is Manager of Photographic Operations for FRF and STS-1. His assistant is Jim Hood, Audio Visual, NASA Headquarters.

2.9.1 KSC

Althea Washington, NASA Headquarters Audio Visual, will manage the KSC News Center Photo News Office (Cocoa Beach). Curtis Hunt, MSFC, will assist.

Ed Harrison, KSC Audio Visual Chief, will supervise KSC photo operations. The NASA contractor for photographic services is Technicolor, Inc. (TI). The TI staff will provide all technical support required to document the pre-mission and launch phase of FRF and STS-1. TI will also provide support to the Photo Office at the off-site news center (Cocoa Beach) in the form of:

- Film editor (Technicolor Inc.)
- Caption writer (TI)
- Photo clerks (2) (TI)
- Typists (2) (TI)
- Couriers (3) (TI)
- Escorts (10) (TI)

2.9.2 JSC

Bill Robbins, JSC Audio Visual Coordinator will supervise JSC PAO photo operations. The contractor (Technicolor, Inc.) will staff the photo office. Prime photographers Andrew Patnesky (still) and Charles Turner (motion picture) will provide required photo coverage at JSC.

2.9.3 DFRC

Photographic services at DFRC (except lakebed photography) will be provided by the contractor-operated DFRC Photo Lab. under the supervision of Larry Montoya, DFRC, and by the Edwards Air Force Base Photo Lab.

Color processing will be done by the EAFB Photo Lab., black and white by the DFRC Photo Lab.

The DFRC Photo Lab. contractor will staff the Photo News Office at the DFRC News Center. The Photo News Officer is yet to be determined. An assistant is yet to be named.

Lakebed photography will be supplied by members of the JSC Photographic Documentation Division, under the supervision of Eugene Edmonds, JSC.

2.9.4 WHITE SANDS/NORTHRUP STRIP

In the event of an end of mission, rather than return to White Sands/Northrup Strip with sufficient advance notice, a Photo News Office will be established at White Sands in the News Center. Personnel from DFRC will staff. Services to the media will be substantially the same as at DFRC.

JSC Photographic Documentation Division will provide lakebed photo services to be used by Public Affairs. Additional photographic services will be provided by the U.S. Army Signal Corps Photo Lab. at the White Sands Missile Range, under contract to NASA.

In the event of an abort once around (AOA)—less than one orbit mission—basic photographic requirements will be provided by the Army Photo Lab. and JSC Photographic Docmentation Division photographers who will be onsite for the mission.

A NASA Public Affairs representative, Larry King of Ames Research Center, will coordinate the Public Afairs requirements for an OAO contingency. Additional help upon notification of an AOA will come from DFRC PAO personnel.

2.10 PROCESSING AND DISTRIBUTION

All film used for public affairs purposes will be processed at the center where it is shot. On orbit photography will be processed at JSC after retrieval from the Columbia.

Designated still color and black and white film will be processed rapidly for "quick release" to the media at KSC, JSC, DFRC and WSMR, if required. Black and white prints, with captions, will be available to the media within two hours after retrieval. Color prints will be available for media distribution in about four hours after retrieval.

Original still negatives will be delivered to NASA HQ Audio Visual. Duplicate negatives will be sent to field center photo offices within seven working days.

Designated motion picture film in a 16mm format will be quick processed at launch and landing for distribution to the TV/Film pool at KSC and DFRC. 16mm prelaunch and other launch footage will be processed at KSC and DFRC on a priority basis and prints made available to HQ, JSC and MSFC in five to seven working days. All 35mm film footage will be shipped directly to NASA HQ Audio Visual for processing.

ARTISTIC DOCUMENTATION

Nationally known artists will be invited to pictorially document the launch and landing of the STS-1 mission. NASA Graphics Coordinator, Robert Schulman, will be responsible for:

- Selection of events to be portrayed
- Selection and commissioning of artists
- Logistics, including funding
- Coordination with cognizant PAOs at News Centers

Preliminary selection of events to be documented include:

- Crew preflight activities (suit up and departure from the Operations and Checkout Building at KSC) One artist (clearance required)

- Launch of Columbia at KSC - three artists

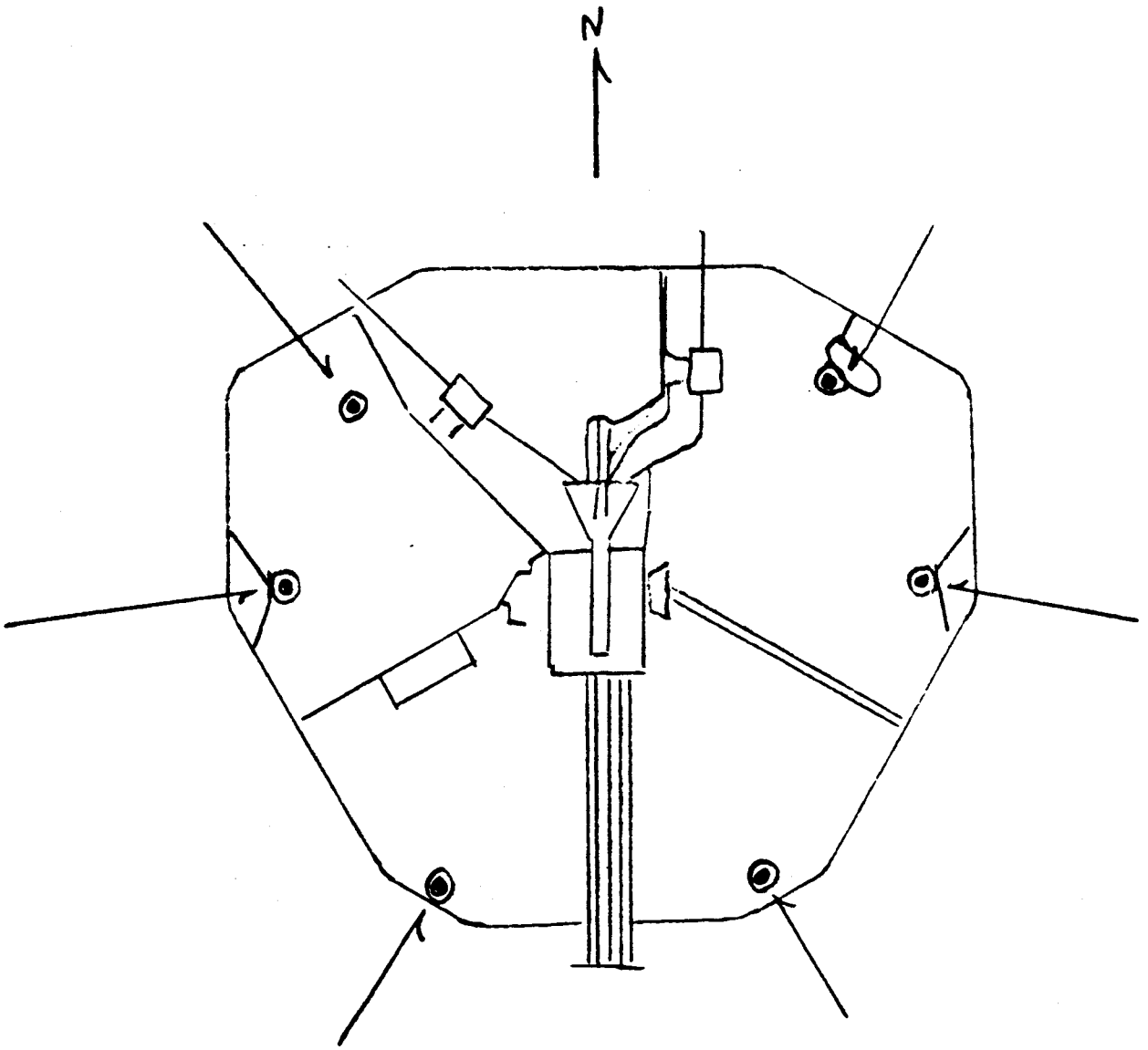
- Landing at DFRC - one artist

- Post-flight crew activities at DFRC - one artist (clearance required)

2.12 CAMERA SITES FOR SPACE SHUTTLE

LAUNCH COMPLEX - 39A

All cameras - remote start

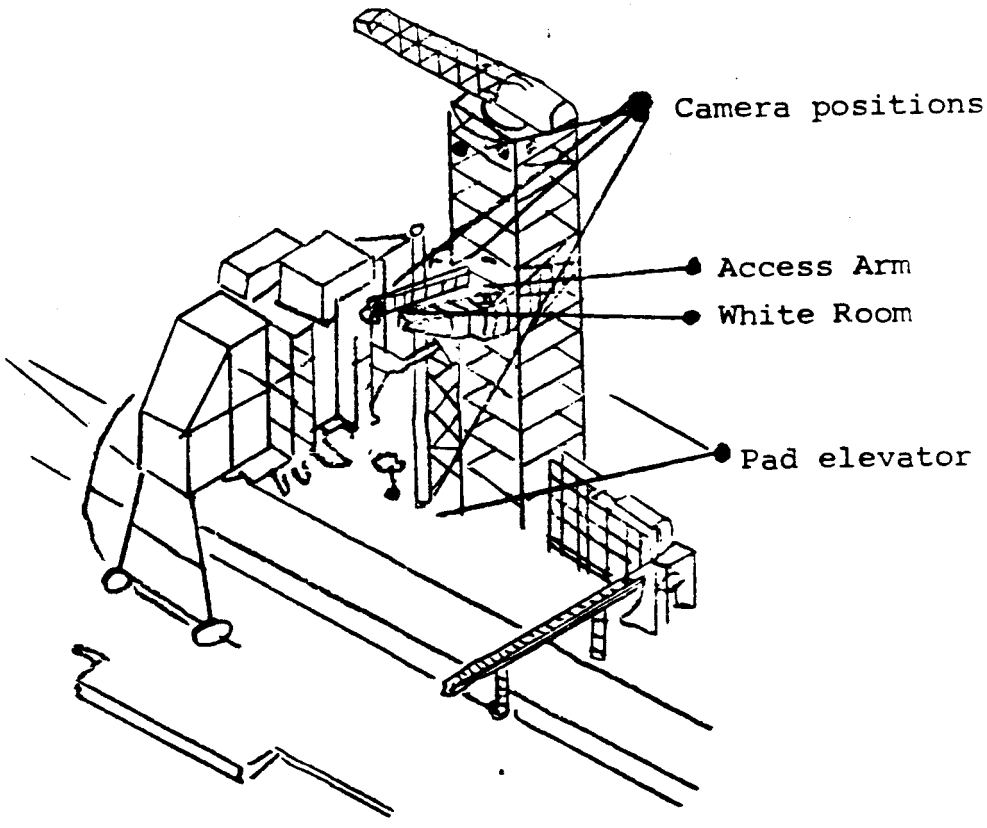


FIXED SERVICE STRUCTURE

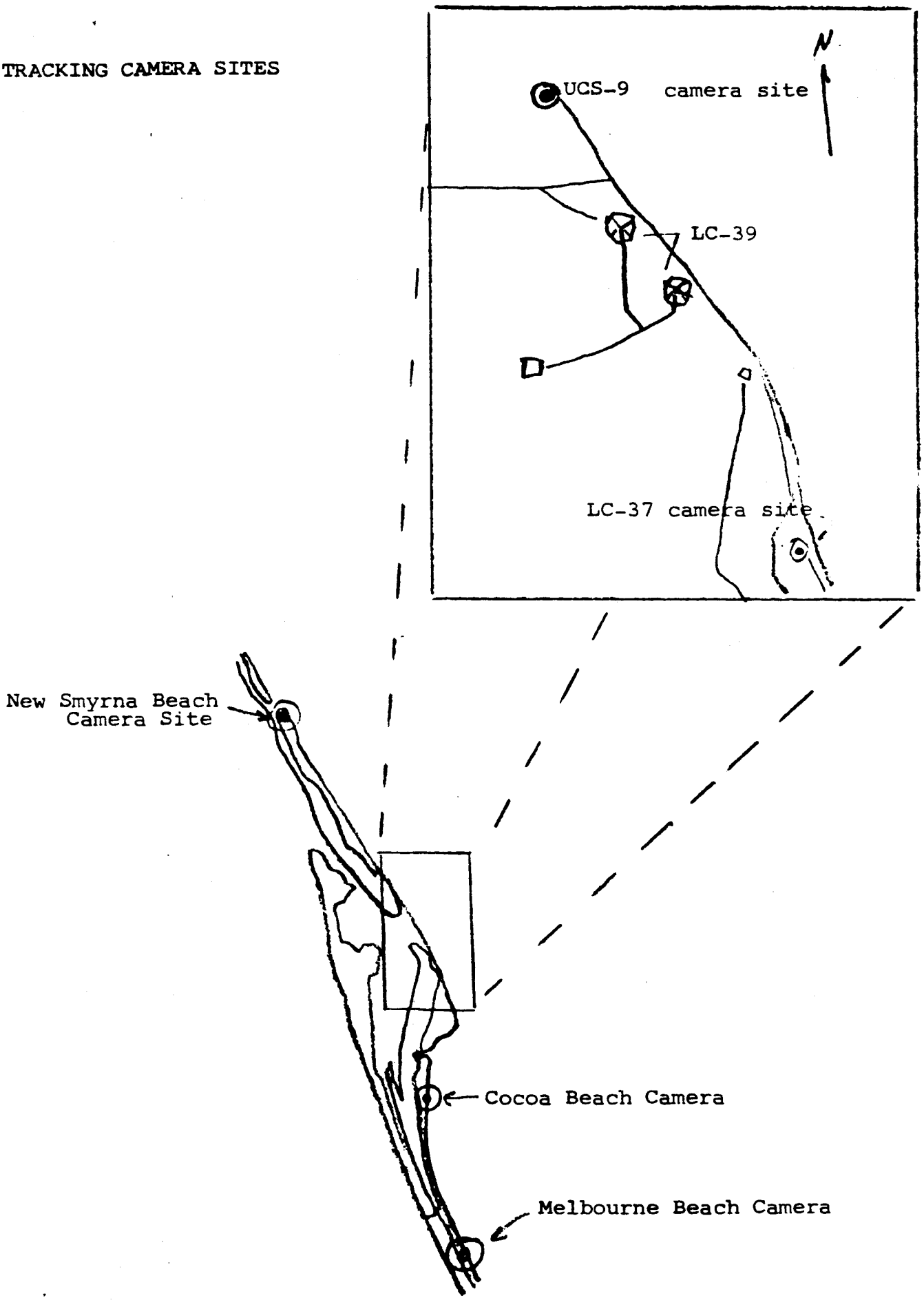
CAMERA POSITIONS

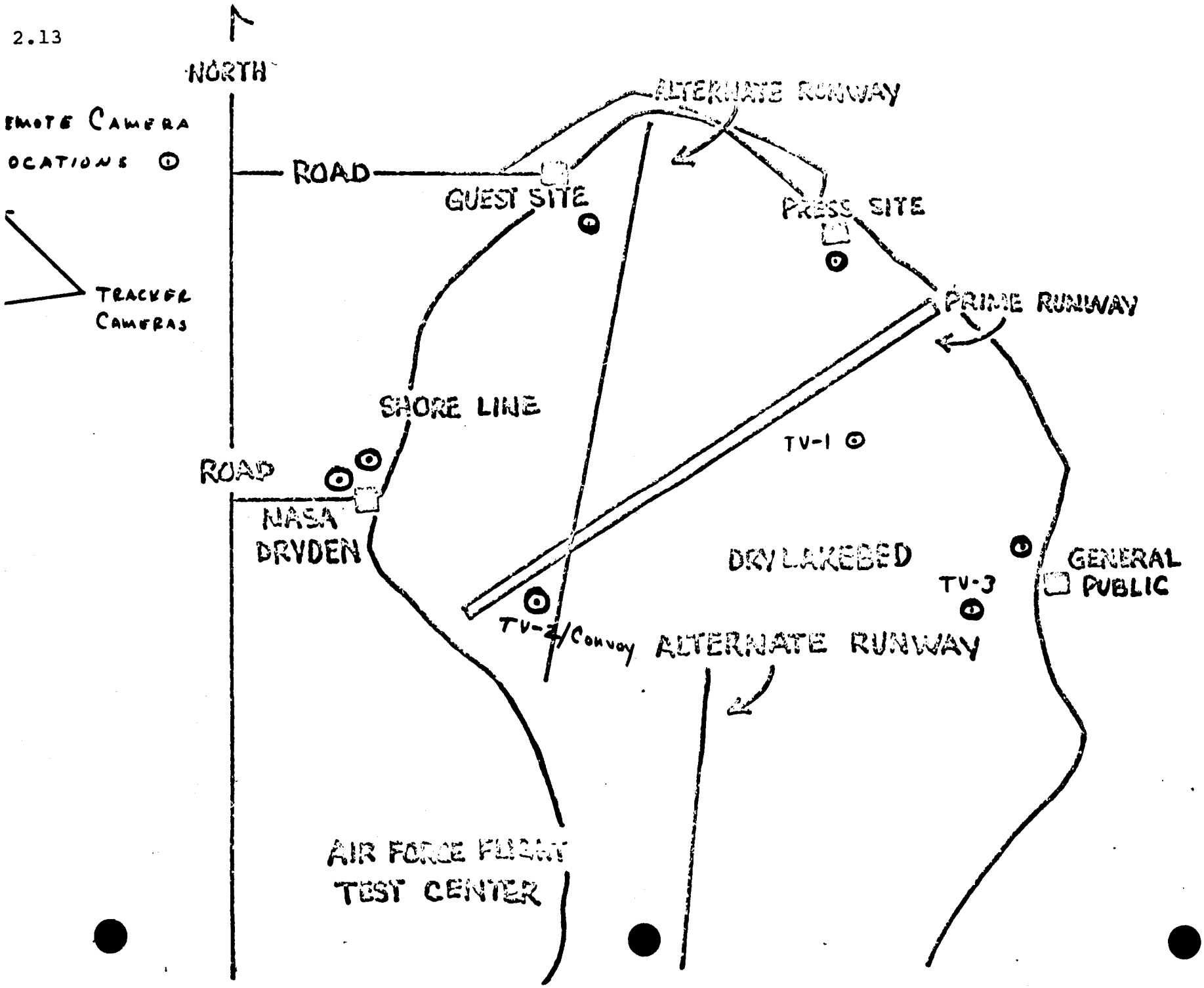
-Overall launch vehicle

-Orbiter during liftoff



TRACKING CAMERA SITES




NORTH
EMOTE CAMERA
OCATIONS
TRACKER
CAMERAS
ALTERNATE RUNWAY
ROAD
GUEST SITE
PRESS SITE
PRIME RUNWAY
SHORE LINE
TV-1
ROAD
NASA
DRYDEN
DRY LAKEBED
GENERAL
PUBLIC
TV-3
TV-2/Convoy
ALTERNATE RUNWAY
AIR FORCE FLIGHT
TEST CENTER

2.13.1

KENNEDY SPACE CENTER

FLIGHT READINESS FIRING

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Launch Complex-39	Photographic opportunities as designated by HQ and KSC PAO photo officers	Still: 6x6 cm B&W 6x6 cm color Motion Picture: 16 mm 35 mm	KSC/Technicolor
LC-39 Perimeter Site Multiple locations	Overall STS vehicle during 20-second FRF. Remote start	Still: 6x6 B&W 6x6 color Motion picture: 16 mm 35 mm	KSC/Technicolor
LC-39 Off-complex perimeter site Multiple locations	Overall STS vehicle during 20-second FRF. Remote start	Still: 6x6 B&W 35 mm color	KSC/Technicolor.
LC-39 Fixed Service Structure-195 foot level	Entire STS vehicle during FRF ignition (camera looking down) Remote start	Still: 35 mm color Motion Picture: 16 mm	KSC/Technicolor
LC-39 Off-Complex	Significant unscheduled events during FRF as designated by PAO	Still: 6x6 B&W 6x6 color Motion Picture: 16 mm	KSC/Technicolor

2.13.2

KENNEDY SPACE CENTER

STS-1 PRELAUNCH

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Designated locations beginning at T-5 to cover astronaut and premission activities	Photo opportunities as designated by HQ/KSC PAO	Still: 6x6 B&W 6x6 color Motion Picture: 16 mm	KSC/Technicolor
Operations and Checkout Building (O & C)	Crew breakfast and suiting on morning of launch. Non-interference basis	Still: 35 mm color Motion Picture: 16 mm	KSC/Technicolor Wilkens and Sommers
Designated locations on launch day	Photo opportunities as designated by HQ/KSC PAO	Still: 6x6 B&W 6x6 color 35 mm color Motion Picture: 16 mm 35 mm	KSC/Technicolor
O & C Building	Orbiter flight crew departure form O&C Building and entry into Transfer Van prior to launch	Still: 6x6 B&W 6x6 color 35 mm color Motion Picture: 16 mm 35 mm	KSC/Technicolor Wilkens and Sommers Press pool coverage by NASA
LC-39 Fixed Service Structure Pad Level	Orbiter flight crew exit from Transfer Van and ingress to FSS elevator prior to launch	Still: 35 mm fixed sequential Motion Picture: 16 mm (remote)	KSC/Technicolor Press Pool coverage by NASA

KENNEDY SPACE CENTER

STS-1 PRELAUNCH

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
LC-39 Fixed Service Structure 195 foot level	Fixed coverage of Orbiter flight crew crossing Access Arm for ingress prior to launch	Motion Picture: 16 mm (remote start)	KSC/Technicolor Press Pool coverage by NASA
LC-39 Fixed Service Structure White Room	Fixed coverage of crew ingress and White Room activities prior to launch.	Still: 35 mm color Motion Picture: 16 mm (remote starts)	KSC/Technicolor Press Pool coverage by NASA

2.13.3

KENNEDY SPACE CENTER

LAUNCH OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Off-complex-outside perimeter fence. Multiple locations	Sequential still coverage of ignition and liftoff	Still: 6x6 B&W 6x6 color 35 mm color (remote starts)	KSC/Technicolor Press Pool coverage by NASA
LC-39 Multiple locations	Fixed-sequential still coverage of ignition and liftoff	Still: 6x6 B&W 6x6 color (remote starts)	KSC/Technicolor Press pool coverage by NASA
LC-39 multiple locations	Fixed coverage of igntion and liftoff	Motion picture: 16 mm 35 mm (remote starts)	KSC/Technicolor TV/film pool coverage by NASA
LC-39 Fixed Service Structure - 275-foot level	High speed vehicle ignition and liftoff showing Orbiter tiles (engineering footage to be used by PAO)	Motion Picture: 16 mm (remote start)	KSC/Engineering/Technicolor
LC-39 Fixed Service Structure - 155 foot level	Tail Service Mast/LH_2 carrier disconect and flame impingement on TSMs at liftoff. High Speed.	Motion Picture: 16 mm (remote start)	KSC/Engineering/Technicolor

KENNEDY SPACE CENTER

STS-1 LAUNCH OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
LC-39 Mobile Launch Platform	Space Shuttle Main Engine nozzles #1 and # 2 and surrounding heat shield after liftoff. Engineering sequential footage	Motion Picture: 16 mm	KSC/Engineering/Technicolor
LC-39 Fixed Service Structure - 255-foot level	Look down view of Orbiter during ignition and liftoff. Sequential still and high speed motion	Still: 35 mm Motion Picture: 16 mm	KSC/Engineering/Technicolor
LC-39 Fixed Service Structure - 255-foot level	Lookdown view of entire STS during ignition and lift-off. Sequentioal still and high speed motion picture	Still: 35 mm Motion Picture: 16 mm (remote start)	KSC/Technicolor Press Pool coverage by NASA
Universal Camera Site Multiple locations	Close-in tracking coverage of entire STS during ignition and loss of vehicle	Motion picture: 16 mm 35 mm	KSC/Technicolor Press Pool coverage by NASA
Patrick Air Force Base	Entire STS vehicle from acquisition to loss of vehicle using long range tracking cameras. Engineering footage	Motion Picture: 16 mm 35 mm	USAF provided under range support agreement

KENNEDY SPACE CENTER

STS-1 LAUNCH OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Vehicle Assembly Roof	STS liftoff to loss of view	Still: 35 mm Motion Picture: 16 mm	KSC/Technicolor 35 mm still to Press Pool
Launch viewing Sites	VIP, general crowds during launch activities	Still: 6x6 B&W 6x6 color Motion Picture: 16 mm	KSC/Technicolor Press Pool coverage by NASA
Helicopter	Aerial coverage of crowds prior to launch	Still: 6x6 color Motion Picture: 16mm	KSC/Technicolor
LC-39	Post launch damage to pad	Motion picture: 16 mm	KSC/Technicolor
Launch Control Center	Final 90 minutes of activities in Launch Control Center prior to liftoff.	Still: 6x6 color Motion Picture: 16 mm 35 mm	KSC/Technicolor Wilkens and Sommers
At Sea	Recovery of Solid Rocket Boosters at sea and return to KSC	Still: 6x6 color	KSC/Tecnicolor

JOHNSON SPACE CENTER

STS-1 ORBIT OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Mission Control Center	Control Center activities from T-3 through crew egress from Columbia	Still: 35 mm B&W 35 mm color Motion Picture: 16 mm	JSC/PAO Patnesky and Turner 16 mm film to TV/film pool B&W still to press pool
JSC Technical Photo Lab	Still views of Columbia TV from TV monitors during flight.	Still: 6x6/35mm B&W 6x6/35mm color	JSC PAO/Technical Photo Lab
Columbia (OV-102)	Launch - Flight deck cockpit and crew	Motion Picture: 16 mm	JSC/Technical Photography
Columbia (OV-102)	Payload Bay	Still: 6x6 color	JSC/Technical Photography
Columbia (OV-102)	Middeck, CO_2 Absorber Replacement	Motion Picture: 16 mm	JSC/Technical Photography
Columbia (OV-102)	Middeck, Crew Systems Deactivation	Still: 35 mm color	JSC/Technical Photography
Columbia (OV-102)	Middeck, Air Sampling	Still: 35 mm color	JSC/Technical Photography
Columbia (OV-102)	Middeck, Food Warmer and Meal preparation	Still: 35 mm color	JSC/Technical Photography

STS-1 ORBIT OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
Columbia (OV-102)	Flight Deck, Out-the-window Earth limb	Still: 6x6 color Motion picture: 16 mm	JSC/ Technical Photography
Columbia (OV-102)	Flight Deck, Cockpit operations during Reaction Control System firings	Still: 6x6 color	JSC/Technical Photography
Columbia (OV-102)	Flight Deck, Cockpit(Yaw left Pulse Test with RCS	Motion Picture:	JSC/Technical Photography
Columbia (OV-102)	Flight Deck, COAS Installation	Motion Picture: 16 mm	JSC/Technical Photography
Columbia (OV-102)	Forward Flight Deck, Auto maneuver	Still: 35 mm color	JSC/Technical Photography
Columbia (OV-102)	Middeck, personal hygiene	Motion Picture: 16 mm	JSC/Technical Photography
Columbia (OV-102)	Cockpit, landing	Motion picture: 16 mm	JSC/Technical Photography

DRYDEN FLIGHT RESEARCH CENTER

STS-1 LANDING OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
*Lakebed TV Van #1	Orbiter approach and landing through crew egress	Still: 35 mm color Motion Picture: 16 mm 35 mm	JSC Photo Technical Div. B&W stills to Photo Office Color stills to Photo Office Film to TV/Film Pool
*Lakebed TV Van #2	Orbiter approach and landing through crew egress	Still: 35 mm color Motion Picture: 16 mm	JSC Photo Technical Div. B&W and color to Photo Office Film to TV/Film Pool
*Lakebed TV Van #3	Orbiter approach and landing through egress	Still: 35 mm color Motion Picture: 16 mm	JSC Photo Technical Div. B&W and color still to Photo Office
Lakebed Press Area	Orbiter approach and landing	Still: 6x6 B&W 35 mm color	DFRC/USAF Contract Teams B&W and color still to Photo Office
Lakebed Public Viewing	Coverage of public reaction to Orbiter approach and landing	Still: 6x6 B&W 35 mm color	DFRC/USAF Contract Teams B&W stills to Photo Office
VIP Area (North Base)	Photo opportunity of VIPs during and after landing	Still: 6x6 B&W 35 mm color	DFRC/Contract Teams
DFRC Control Room	Control room activities during and after Orbiter landing	Still: 6x6 B&W 35 mm color	DFRC/Contract Photographers B&W stills to Photo Office

NOTE: In the event of an abort-once-around contingency landing at White Sands Missile Range, N.M., JSC Photo Technical Division will provide lakebed photography. U.S. Army will assist in off-lakebed photography.

DRYDEN FLIGHT RESEARCH CENTER

STS-1 LANDING OPERATIONS

LOCATION	EVENT	FORMAT	RESPONSIBILITY/NOTES
NASA Chase Aircraft	Chase plane coverage during Orbiter approach and landing	Still: 35 mm color Motion Picture: 16 mm (dual mounted)	JSC/Technical Photography Film to EAFB Photo Lab., to Photo Office and TV/Film Pool
Off-Site Long Range Photography	Approach of Orbiter for landing	Undetermined	DFRC/USAF Film to EAFB Photo Lab Prints to PAO
Briefing Room (DFRC)	Coverage of debriefing of crew following flight (non-interference basis)	Still: 6x6 B&W 35 mm color Motion Picture: 16 mm sound	DFRC/Contract Teams B&W to Photo Office Color to Photo Office Film to TV/Film Pool
Press Conference at Auditorium	Press conference with crew and/or program officials	Still: 6x6 B&W 35 mm still Motion Picture: 16 mm sound	DFRC/Contract Teams B&W to Photo Office Color still to Photo Office Film to TV/Film Pool

3.0 TELECOMMUNICATIONS

3.1 POLICY

Information about orbital flight test operational activities will be disseminated in real time through audio and video distribution networks which constitute a telecommunications system. Public Affairs management and coordination of programming on the networks will utilize intercenter voice communication circuits to maintain effective Agency-wide planning and implementation.

3.2 PURPOSE

The use of the Telecommunications System will assure NASA and the media that all of the information available to NASA Public Affairs is made available to the media in real time, and that it is stated in the same manner and presented in the same form simultaneously at all STS-1 News Center locations. The Telecommunications System will provide an audio/video capability to originate information for simultaneous dissemination to all STS-1 operational locations by collecting the information from all locations at any one of them and processing it for network distribution to all STS News Centers, other NASA locations and elsewhere as appropriate.

3.3 IMPLEMENTATION PLAN FOR AUDIO NETWORK PRODUCTION AND DISTRIBUTION

The Public Affairs Audio Release Network, "PAO Release," will originate through NASA facilities at KSC, JSC, MSFC, DFRC and WSMR/NS.

Appropriate arrangements will be provided to enable accredited media representatives to listen to the Network programming in the NASA News Centers and Press Centers at those locations and Headquarters during activities associated with all Oribtal Flight Test operations, and at other Centers on a more limited basis.

Broadcast media will be granted direct access to the Network at the originating locations with permission to incorporate the NASA audio in whole or in part in radio and television programming.

3.3.1 PRE-LAUNCH ACTIVITIES AND LAUNCH OPERATIONS PHASE

3.3.1.1 Network Responsibility and Control

The Audio Release Network will be activated from KSC to provide scheduled coverage during the Flight Readiness Firing and Mission Verification Test simulations. The Network will be activated again at T-5 to provide coverage of launch preparations and launch operations. JSC, MSFC, DFRC and WSMR/NS will provide supporting coverage to KSC from their respective locations as necessary.

The PAO Commentator at KSC will exercise control of the network during this phase. He will develop the information to be released, determine the selection

of programming sequences and content, and coordinate his activities and decisions with PAO commentators at other Centers as well as the Executive Producer of the Video Release Network.

3.3.1.2 Audio Facilities Equipment and Personnel

The Commentator will operate from the PAO Console in the Launch Control Center during test, simulation and launch activities. At other times he will work from positions established for that purpose at the Press Site News Center.

The Audio Release Network Control Room at KSC will be located in the Press Site News Center. The facility will be designed by Planning Research Corporation for the Communications Branch of KSC Electronic Engineering. It will be installed by RCA under contract to TI-COM-3. New equipment purchases will be funded by the KSC STS Program Office.

The Control Room will be operated by RCA under the supervision of the KSC Public Affairs Office.

Production of pre-launch and launch coverage will utilize a total of 15 primary sources; nine of them originating at KSC.

KSC PAO Commentator - LCC or News Center locations.

Umbilical Intercom - Crew communication with White Room and KSC Launch Control.

Pad Sound - Launch pad actuality during lift-off.

Press Site News Center - Briefings and News Conferences.

North Parkway VIP Site - VIP actuality.

Pelican Plaza VIP Site - VIP actuality.

Seagull Plaza VIP Site - VIP actuality.

TV Audio - Audio from Video Network camera locations and videotape recorders at KSC, selected and mixed at the Video Network audio console.

Playback Audio - Audio from Audio Network recorders located in the KSC control room.

Six sources originating at other Centers will include:

Air/Ground Select - Prime crew communication link with JSC MCC selected from A/G 1, A/G 2 and A/G UHF at JSC and fed to KSC via AT&T longline.

JSC/DFRC Commentary - PAO Commentators, voice only or sequenced with other local audio sources, fed to KSC via AT&T longline.

NS Commentary - PAO Commentators, voice only or sequenced with other local audio sources, fed to KSC via AT&T longline.

MSFC Commentary - PAO Commentators, voice only or sequenced with other local audio sources, fed to KSC via AT&T longline.

RCA Americom - Audio following video in lip synch when KSC is receiving video from other Centers via satellite.

Lip Synch Audio - Audio following video in lip synch when KSC is receiving video from other Centers via terrestrial link.

Audio Network facilities, equipment and personnel required at the Johnson Space Center, the Dryden Flight Research Center and the White Sands Missile Range/Northrup Strip are described in subsequent sections of the Telecommunications plan.

Facilities and personnel at the Marshall Space Flight Center will include a PAO Commentator's position located in the Huntsville Operations Support Center (HOSC). This position will be on standby status during nominal pre-launch tests, launch preparations and launch operations. It will become fully operational during non-nominal situations involving the propulsion system when HOSC becomes a principal source of information about conditions which affect mission status.

The facility will be designed by (TBD) for the MSFC (TBD), and operated by (TBD) under the supervision and control of the MSFC Public Affairs Office.

New equipment costs will be funded by (TBD).

The MSFC PAO Commentator will be provided with PAO Release, PAO COORD, PAO CUE and PAO ENGINEERING. He will coordinate his activities with the HOSC (TBD) on the (TBD), and will have access to the HOSC voice communication circuits at MSFC and with MSFC representatives located at KSC.

3.3.1.3 Distribution

PAO Release, the sequenced output of the Audio Release Network, will flow from KSC through GSFC via AT&T longlines to all other NASA Centers and Headquarters for on-site distribution as required.

PAO Release will also flow through the Video Network Control Room and the KSC Communications Distribution and Switching Center to the RCA KSC Earth Station for distribution by commercial satellite relay to Video Network locations.

On-site distribution of PAO Release at KSC will include the Press Site News Center, the Press Viewing Site, the VIP Viewing Site, selected Public Viewing Sites and the Visitors Information Center.

Direct media access to PAO Release at the Press Viewing Site will be provided as follows:

Low Impedance - 100 XLR 600 ohm o db plugs

High Impedance - 50 RCA Phono jacks

Terminal Strips - 8 strips x 8 outputs each

Access in the Press Site News Center:

Terminal Strips - 8 strips x 8 outputs each

Access at the Broadcast Interface:

Distribution Amplifiers - 6 DA's x 8 outputs each

The Broadcast Interface complex can also be configured to provide unmixed, uninterrupted feeds of other Audio Network sources as required.

3.3.1.4 Communications

The KSC PAO Commentator will have access to all Air/Ground and Umbilical communication with the crew as well as all Launch Control communication with the Test Conductor and Launch Director.

The Commentator will coordinate Audio Release Network activities with the Director of Public Affairs, the STS Public Affairs Officer, the JSC, DFRC, and MSFC Public Affairs Officers and other Headquarters and Center public affairs managers and supervisors via the PAO COORD circuit.

He will coordinate with the Audio Network Control Room, other PAO Commentators and the Video Release Network via PAO CUE, and with the Audio Network Control Room via PAO ENGINEERING. The principal media interface regarding Audio Network operations and services will be through the Press Site Manager's Office, telephone (TBD).

3.3.2 FLIGHT OPERATIONS PHASE

3.3.2.1 Network Responsibility and Control

Responsibility for the PAO Commentary will pass to JSC after SRB ignition. Technical responsibility for the Audio Release Network will passs to JSC during the first LOS after a nominal orbit is assured. The PAO Commentators on duty at JSC will exercise control of the network from SRB ignition through landing and rollout. They will develop the information to be released, determine the selection of programming sequences and content, and coordinate their activities and decisions with PAO Commentators at other Centers as well as the Executive Producer of the Video Release Network.

3.3.2.2 Audio Production Facilities and Personnel

The JSC Commentator will operate from the PAO Console in the Mission Operations Control Room (MOCR).

The Audio Network Control Room at JSC will be located in the News Center in Building 2. It will be designed and installed by AV Service Corporation for the JSC Office of Public Affairs. The PAO Console in the MOCR and the Audio Network Control facility will be operated by AV under the supervision and control of JSC Public Affairs.

New equipment purchases will be funded by JSC.

Production of Audio Network coverage during flight operations will utilize a total of 14 primary sources, nine of them originating at JSC.

JSC PAO Commentator - Commentator in Mission Control Center.

Air/Ground #1 - Crew communication with JSC MCC.

Air/Ground #2 - Crew communication with JSC MCC.

Air/Ground UHF - Crew communication with JSC MCC.

Air/Ground Select - Prime crew communication with JSC MCC selected from A/G 1, A/G 2 and A/G UHF.

Playback Audio - Audio from Audio Network recorders in Bldg. 2.

TV Audio - Audio from Video Network videotape recorders at JSC, selected and mixed at the Video Network audio console.

Bldg. 2 Briefing Room - Audio from change of shift briefings.

Press Center Auditorium - Audio from news conferences in Press Center auditorium.

Five sources originating at other Centers will include:

KSC Commentary - PAO Commentator, voice only or sequenced with other local audio sources at KSC.

DFRC Commentary - PAO Commentator, voice only or sequenced with other local audio sources at DFRC.

NS Audio - PAO Commentator, voice only or sequenced with other audio sources at NS.

RCA Americom - Audio following video in lip synch when JSC is receiving video from the orbiter or other Centers via satellite.

Lip Synch Audio - Audio following video in lip synch when JSC is receiving video from other Centers via terrestrial link.

3.3.2.3 Distribution

The output of the Audio Release Network, PAO Release, will flow from Building 2 to JSC CLS Board in Building 30, then via AT&T longlines to all other NASA Centers including GSFC and Headquarters for on-site distribution as required.

It will also flow through Video Network Control and the JSC Comm Control to the RCA JSC Earth Station for distribution by commercial satellite relay to other Video Network locations.

On-site distribution of PAO release at JSC will include the News Center, the Press Center and the Visitors Information Center.

Direct media access to Audio Network sources at the JSC News Center, Building 2, Room 135-36, will include:

PAO Release - 72 Outputs

PAO Commentary - 18 Outputs

Air/Ground Select - 18 Outputs

Video Release Network Audio - 18 Outputs

3.3.2.4 Communications

The JSC PAO Commentator will have access to all Air/Ground communication with the crew as well as all Mission Operations Control Room communication with the Flight Director.

The Commentator will coordinate Audio Release Network activities with the Director of Public Affairs, the STS Public Affairs Office, the JSC, DFRC and MSFC Public Affairs Officers and other Headquarters and Center public affairs managers and supervisors via the PAO COORD circuit.

He will coordinate with the Audio Network Control Room, other PAO Commentators and the Video Release Network via PAO CUE, and the Audio Network Control Room via PAO ENGINEERING.

The principal media interface regarding Audio Network operations and services will be through (TBD).

3.3.3 NOMINAL LANDING OPERATIONS PHASE - DFRC

3.3.3.1 Network Responsibility and Control

Responsibility for the PAO Audio Release Network will remain with JSC through landing and rollout. During this period, the PAO Commentators at JSC will exercise control of the network and will develop the information to be released, determine the selection of programming sequences and content, and coordinate their activities and decisions with PAO Commentators at other Centers as well as the Executive Producer of the Video Release Network.

The Commentator at DFRC will provide supporting coverage to JSC.

3.3.3.2 Audio Production Facilities and Personnel

The JSC Commentator will continue to operate from the PAO Console in the Mission Operations Control Room. The Commentator at DFRC will operate from the PAO Console in the Flight Operations Control Room.

Control of the Audio Network will be retained by JSC as configured for Flight Operations coverage.

The Audio Network control facility at DFRC will be located in the audio/video trailer adjacent to the Intercenter Support Facility. It will be designed and installed by Taft Broadcasting under contract to JSC Center Operations, and will be operated by Taft under the supervison and control of JSC Public Affairs.

New equipment purchases will be funded by the JSC STS Program Office.

Production of Audio Network coverage during landing operations will utilize a total of 19 primary sources, 14 at JSC as configured for Flight Operations and five originating at DFRC.

PAO Commentator - Commentator in DFRC Flight Operations Control Room.

TV-#1(J) - Actuality sound from Video Network mobile unit situated at planned touchdown point.

TV-#3(J) - Actuality sound from Video Network mobile unit situated at the east edge of the lakebed.

Press Center Auditorium - Audio from news conferences or briefings in the DFRC Press Center.

Playback Audio - Audio from Audio Network Recorders in Audio/Video Trailer.

3.3.3.3 Distribution

The configuration of the Audio Release Network will remain unchanged for distribution from JSC during Landing Operations.

On-site distribution at DFRC, funded, installed and operated by JSC, will include the News Center, the Press Center and the Press Center Annex. Distribution to the Press Viewing Site and the VIP Viewing Sites will be provided by the DFRC Public Affairs office.

Direct media access to Audio Network sources at DFRC will include:

PAO Release - 48 Outputs

PAO Commentary - 16 Outputs

Air/Ground Select - 16 Outputs

TV-#1(J) Audio - 16 Outputs

TV-#2(J) Audio - 16 Outputs

3.3.3.4 Communications

Access to and configuration and use of voice communication circuits at JSC will remain unchanged during landing operations.

The PAO Commentator at DFRC will have access to all Air/Ground communication with the crew, Mission Operations Control Room communication with the Flight Director, and Flight Operations Control communication with the OFT Manager.

The Commentator at DFRC will coordinate Audio Network activities with the Commentator at JSC on PAO COORD and PAO CUE. He will coordinate with the Audio Network control room in the audio/video trailer at DFRC on PAO CUE and PAO ENGINEERING. He will coordinate with the PIO in the landing operations convoy on (TBD).

The principal media interface regarding Audio Network operations and services at JSC will continue to be (TBD). The interface at DFRC will be through (TBD).

3.3.4 NOMINAL POST-LANDING OPERATIONS PHASE - DFRC

3.3.4.1 Network Responsibility and Control

Responsibility for the PAO Audio Release Network will pass to DFRC after rollout and wheel stop. The PAO Commentator at DFRC will exercise control of the network and will develop the information to be released, determine the schedule and selection of programming sequences and content, and coordinate his activities and decisions with PAO Commentators at other Centers as well as the Executive Producer of the Video Network.

The Commentator at JSC will provide supporting coverage to DFRC until crew egress.

3.3.4.2 Audio Production Facilities and Personnel

The Commentator at DFRC will operate from the PAO Console in the Flight Operations Control Room.

The Audio Control Facility will be the Audio Network Control Room.

Production of Audio Network coverage during post-landing operations will utilize a total of nine primary sources, six of them originating at DFRC:

PAO Commentator - Commentator in Flight Operations Control Room.

TV-#1(J) - Lakebed PIO Commentary and/or crew egress activities from Video Network mobile unit in landing operations convoy.

TV-#2(J) - Actuality sound from Video Network mobile unit covering crew activities upon arrival at medical facility.

Press Center Auditorium - Audio from news conferences or briefings in the DFRC Press Center.

Playback Audio - Audio from Audio Network Recorders in the Audio Control Facility.

TV Audio - Audio from Video Network videotape recorders in the Audio Control Facility.

Three sources originating at other Centers will include:

JSC Commentary - PAO Commentator, voice only or mixed with other audio sources at JSC.

Air/Ground Select - Prime crew communication selected from A/G 1, A/G 2 and A/G UHF.

RCA Americom - Audio following video in lip synch when DFRC is receiving video from other Centers via satellite.

3.3.4.3 Distribution

The configuration of the Audio Release Network for distribution at DFRC during landing operations will be retained during post-landing operations, as will on-site distribution and direct media access.

3.3.4.4 Communications

Access to and configuration and use of voice communication circuits at DFRC during landing operations will be retained during post-landing operations.

The Commentator at DFRC will coordinate Audio Release Network activities with the Director of Public Affairs, the STS Public Affairs Officer, the JSC Public Affairs Officer and other Headquarters and Center public affairs managers and supervisors on the PAO COORD circuit. He will coordinate with the Audio Network Control Room, other PAO Commentators and the Video Release Network on PAO CUE, and with the Audio Release Network Control Room in the audio/video trailer on PAO ENGINEERING.

The principal media interface regarding Audio Network operations and services will be through (TBD).

3.3.5 RETURN TO LAUNCH SITE ABORT AND LANDING

3.3.5.1 Network Responsibility and Control

Responsibility for PAO Commentary will pass from KSC to JSC after SRB ignition. In the event of a return to the launch site abort and landing, the PAO Commentator on duty at JSC will continue to exercise control of the network through landing and rollout as described for Flight Operations and Landing Operations. Technical responsibility for the Audio Release Network will remain at KSC as configured for Launch Operations.

The KSC Commentator will continue to provide supporting coverage to JSC from the LCC.

3.3.5.2 Audio Production Facilities and Personnel

There will be no change in production facilities and personnel as described for JSC during nominal Flight Operations and Landing Operations; except to delete DFRC Commentary and NS Audio from sources originating at other Centers.

Shuttle Landing Facility audio from KSC will be provided through Video Network mobile units as repositioned for RTLS coverage and mixed with commentary on the KSC Commentary, RCA Americom and Lip Snych Audio circuits to JSC.

3.3.5.3 Distribution

Distribution at JSC and KSC as configured for nominal Flight Operations and Landing Operations will be retained. Distribution at DFRC as configured for nominal Launch Operations will be retained.

3.3.5.4 Communications

Communications will be configured and coordinated as described for nominal Flight Operations, with the retention of the nominal Launch Operations configuration at KSC.

3.3.6 RTLS POST-LANDING OPERATIONS

3.3.6.1 Network Responsibility and Control

Responsibility for the PAO Audio Release Network will return from JSC to KSC after rollout and wheel stop. The PAO Commentator at KSC will exercise control of the network.

The Commentator at JSC will provide supporting coverage to KSC from Mission Control until crew egress.

3.3.6.2 Audio Production Facilities and Personnel

The Commentator at KSC will continue to operate from the PAO Console in LCC while it remains active and then will move to his position at the Press Site. The Audio Release Network Control Room will again be the facility in the Press Site News Center.

Production of post-landing operations coverage will be limited to eight KSC sources:

PAO Commentary - PAO Commentator

Press Site News Center - Briefings and News Conferences

TV Audio - Audio from Video Network Camera locations as repositioned to the landing strip or assigned to other locations activated because of the RTLS abort, as well as audio from videotape recorders at KSC.

Playback Audio - Audio from Audio Network recorders located in the KSC control rooms.

Sources originating at other Centers will include:

Air/Ground Select - Prime crew communication link with JSC MCC.

JSC Commentary - PAO Commentator, voice only or sequenced with other JSC sources.

RCA Americom - Audio following video in lip synch when KSC is receiving video from other Centers via satellite.

Lip Synch Audio - Audio following video in lip synch when KSC is receiving video from other Centers via terrestrial link.

3.3.6.3 Distribution

Configured as for Launch Operations.

3.3.6.4 Communications

Configured as for Launch Operations.

3.3.7 AOA LANDING AND POST-LANDING OPERATIONS AT NORTHRUP STRIP

3.3.7.1 Network Responsibility and Control

Responsibility for the PAO Audio Release Network will remain with JSC through landing and post-landing operations. The PAO Commentator at JSC will exercise control of the network. There will be no commentator at the landing site.

3.3.7.2 Audio Production Facilities and Personnel

Audio Network Control will be retained by JSC as configured for Flight Operations coverage. The only audio sources at the landing site will be the shotgun microphone carried by TV-#3, the Video Network mobile unit which is located at Northrup Strip during the launch phase and then transported to DFRC.

3.3.7.3 Distribution

Distribution will be configured as described for Flight Operations, with the addition of eight outputs for direct media access at the landing site PAO complex. There will be no other on-site distribution of PAO Release.

3.3.7.4 Communications

Communication will be configured as described for Flight Operations. There will be no media interface at Northrup Strip.

3.3.8 NOMINAL LANDING AND POST-LANDING OPERATIONS AT NORTHRUP STRIP

3.3.8.1 Network Responsibility and Control

Responsibility for the PAO Audio Release Network will remain with JSC through landing and rollout, as described for nominal landing operations at DFRC.

The Commentator at Northrup Strip will provide coverage to JSC from the landing site.

3.3.8.2 Audio Production Facilities and Personnel

The JSC Commentator will continue to operate from the PAO Console in the Mission Operations Control Room. The Commentator at NS will operate from the OFT Operations Center.

Audio Network Control will be retained by JSC as configured for Flight Operations coverage.

The Audio Network control facility at NS will be located in TV-#5(J). It will be designed and installed by Taft Broadcasting under contract to JSC Center Operations, and will be operated by Taft under the supervision and control of JSC Public Affairs.

New equipment purchases will be funded by the JSC STS Program Office.

Production of Audio Network coverage during landing operations at NS will utilize a total of 18 primary sources, 14 at JSC as configured for Flight Operations and four originating at NS.

PAO Commentator - NS Commentator located in the Control Tower.

TV-#3(J) - Actuality sound from Video Network mobile unit situated at landing site.

TV-#5(J) - Actuality sound from Video Network mobile unit situated at landing site.

Landing Site Press Center - Audio from briefings and news conferences at landing site.

Playback Audio - Audio from Audio Network recorders in (TBD).

3.3.8.3 Distribution

The configuration of the Audio Release Network will remain unchanged for distribution from JSC during landing operations at NS.

On-site distribution at NS, funded by (TBD), will include the NASA News Center at White Sands Missile Range, the Landing Site Press Center, the Press Viewing Site, the VIP Viewing Site and selected Public Viewing Sites.

Direct media access to Audio Network sources at NS will include:

PAO Release - (TBD) Outputs

PAO Commentary - (TBD) Outputs

Air/Ground Select - (TBD) Outputs

TV-#3(J) Audio - (TBD) Outputs

TV-#5(J) Audio - (TBD) Outputs

3.3.8.4 Communications

Access to and configuration and use of voice communication circuits at JSC will remain unchanged during landing operations at NS.

The PAO Commentator at NS will have access to (TBD).

The PAO Commentator at NS will coordinate Audio Network activities with the Commentator at JSC on PAO COORD and PAO CUE. He will coordinate with the Audio Network control room in (TBD) on PAO CUE and PAO ENGINEERING.

The principal media interface regarding Audio Network operations and services at JSC will continue to be (TBD).

3.3.9 AOA LANDING AND POST-LANDING OPERATIONS AT DFRC

3.3.9.1 Network Responsibility and Control

As described for nominal landing and post-landing operations.

3.3.9.2 Audio Production Facilities and Personnel

As described for nominal landing and post-landing operations except delete TV-#3 mobile unit audio capability and personnel.

3.3.9.3 Distribution

As described for nominal landing and post-landing operations.

3.3.9.4 Communications

As described for nominal landing and post-landing operations.

3.4 IMPLEMENTATION PLAN FOR VIDEO NETWORK PRODUCTION AND DISTRIBUTION

The Public Affairs Video Release Network will originate through NASA facilities at KSC, JSC, DFRC and WSMR/NS.

Appropriate arrangements will be provided to enable accredited media representatives to view the network programming in STS News Centers and Press Centers during activities associated with major orbital flight test operations, and at Headquarters and other Centers on a more limited basis.

Television media will be granted direct access to the network at the originating locations and AT&T CTO in New York and Los Angeles with permission to incorporate the NASA Video in whole or in part in television programming.

3.4.1 PRE-LAUNCH ACTIVITIES AND LAUNCH OPERATIONS PHASE

3.4.1.1 Network Responsibility and Control

The Video Release Network will be activated from KSC to provide scheduled coverage during the Flight Readiness Firing and Mission Verification Test

simulations. The Network will be activated again at T-5 to provide coverage of pre-launch activities, launch preparations and launch operations. Supporting coverage will be provided to KSC from JSC and WSMR/NS by JSC. Supporting coverage from DFRC will be provided via WSMR/NS as appropriate.

The Deputy Director of Public Affairs, as PAO Video Release Network Executive Producer, will exercise control of the network at KSC and determine the selection of programming sequences and content.

3.4.1.2 Video Facilities, Equipment and Personnel

The PAO Video Release Network Control Room at KSC will be located in the Press Site News Center. The facility will be designed by Planning Research Corporation for the Communication Branch of KSC Electronic Engineering. It will be installed by RCA under contract to TI-COM-2. New equipment purchases will be funded by the KSC STS Program Office.

The control room will be operated by RCA under the supervision of the KSC (TBD).

Sequencing of pre-launch and launch operations coverage will utilize a total of 17 color cameras. Ten of these will be provided by the KSC Communications Branch with STS Program Office funding, six in fixed locations and four in mobile units:

TV-#1(K) - Minicam unit installed in van equipped with microwave transmitter.

TV-#2(K) - Minicam unit installed in van equipped with microwave transmitter.

TV-#3(K) - Minicam unit installed in van equipped with microwave transmitter.

TV-#4(K) - Studio camera unit installed on the VAB roof.

TV-#5(K) - Studio camera until installed in van located at Universal Camera Site #15.

TV-#6(K) - Studio camera until installed on the Mate/DeMate Device at the Shuttle Landing Facility.

TV-#7(K) - Minicam unit fix mounted at Universal Camera Site #2.

TV-#8(K) - Minicam unit fix mounted in the White Room.

FR 1 - Remote controlled minicam unit in Launch Control Center Firing Room #1.

FR 2 - Remote controlled minicam unit in Launch Control Center Firing Room #1.

One camera at KSC will be provided by JSC:

TV Chase #1 - Minicam unit installed in chase aircraft equipped with mirowave transmitter.

The other sources will include:

JSC Select - Sequenced output of two JSC color cameras and monochrome MOCR displays at JSC.

MOCR 1 - Remote controlled minicam unit in the Misssion Operations Control Room.

MOCR 2 - Remote controlled minicam unit in the Mission Operations Control Room.

NS Select - Sequenced output of three JSC color cameras and one WSMR telescopic camera at WSMR/NS.

TV-#3(J) - Minicam unit installed in van equipped with microwave transmitter.

TV-#5(J) - Studio camera unit installed in van.

TV Chase #2 - Minicam unit installed in chase aircraft equipped with microwave transmitter.

TV Tracker - DFRC Radar directed monochrome camera with telescopic lens.

VTR Playback - Output of four Video Release Network videotape recorders in the network control room.

Film Slide System - Output of the Video Release Network film chain in the network control room.

OTV - Selected from 60 OTV monochrome camera locations.

TV Tracker - Air Force long range monochrome tracking camera.

Engineering video sources will include (TBD).

3.4.1.3 Distribution

NASA Select, the output of the sequencing switcher in the Press Site News Center network control room, will flow through the KSC Communications Switching and Distribution Center to the GSTDN site at MILA, then to the RCA Earth Station for commercial satellite relay service. Primary distribution of the PAO Video Release Network via satellite will include the Johnson Space Center, the Dryden Flight Research Center, the Goddard Space Flight Center and NASA Headquarters, AT&T CTO in Los Angeles and New York City. Distribution of the PAO Video Release Network to the Marshall Space Flight Center will be via AT&T terrestrial service.

NASA Select will be distributed at the Press Site News Center and the Press Viewing Site and will flow through the Communications Distribution and Switching Center to the RCA KSC Earth Station.

NASA Select will also flow through Communications Distribution and Switching Center for on-site distribution to the KSC Visitor Information Center.

Direct media access to NASA Select will be provided at the Broadcast Interface through a distribution system of 21 amplifiers. This distribution system will also provide for media access to uninterrupted feeds of all of the individual circuits originating at KSC, as well as five of the B&W operational circuits.

3.4.1.4 Communications

The Executive Producer will coordinate Video Release Network activities with the Director of Public Affairs, the STS Public Affairs Officer, the KSC, JSC, DFRC and MSFC Public Affairs Officers and other Headquarters and Center public affairs managers and supervisors on the PAO COORD circuit.

He will coordinate with the Audio Release Network and PAO Commentators on PAO CUE and PAO ENGINEERING.

The Executive Producer will plan and exercise control of Video Release Network distribution activities on the VIDEO OPERATIONS circuit. His principal media interface will be the TV NETWORK COORDINATION circuit.

The Head of the Headquarters Audio Visual Section, as Producer/Director of Video Release Network Launch Operations coverage, will implement Network programming plans and direct the activities of the Network production staff on the (TBD) circuit, which will be transmitted by repeater to all mobile units. He will coordinate and communicate with the airborne unit in TV Chase as neceesary through the TV Chase Technical Director on two VHF-AM channels.

The RCA Technical Director will implement Network technical requirements, direct the activities of engineering and support personnel, and coordinate with other Centers, on the (TBD), PAO ENGINEERING and VIDEO OPERATIONS circuits.

3.4.1.5 Coverage Scenario

Primary Mission Verification Test, pre-launch and launch operations coverage will be produced with the complement of ground-based, mobile and airborne cameras located at KSC. Deployment during the Flight Readiness Firing and Mission Verification Test simulations and other pre-launch activities will conform to the plan for actual launch preparations and launch.

Continuous coverage of the STS-1 launch configuration will be provided by TV-#7(K) at UCS #2, TV-#3(K) at UCS #4, TV-#4(K) on the VAB roof and TV-#5(K) at UCS #15.

Control room activities will be covered by FR 1 and FR 2 at KSC and MOCR #1 and MOCR #2 at JSC.

Crew activities at the Operations and Check-out Building will be covered by TV-#1(K) and TV-#2(K).

After the crew has departed O&C, TV-#2(K) will move to the Shuttle Landing Facility and take up a position in the RTLS landing operations convoy,

while TV-#6(K) covers RTLS preparations from the MDD. TV-#1(K) will move to the Press Site News Center to cover status reports or other pre-launch activities there as appropriate.

Crew arrival at the launch pad will be covered by cameras assigned to the launch coverage configuration, and coverage of crew egress will be provided by TV-#8(K), the camera in the White Room.

As appropriate during the countdown, coverage sequences will be developed to illustrate and describe RTLS preparations at KSC and AOA preparations at WSMR/NS. TV Chase #1 would be airborne at KSC during the production of this sequence at that location. TV Chase #2 would not be airborne at WSMR under nominal circumstances.

Other coverage from JSC and WSMR/NS will be developed and integrated into pre-launch and launch coverage as circumstances warrant.

At launch, in addition to the color coverage of the cameras identified above, monochrome coverage will also be available from the KSC Operational Television System and the PAFB Air Force long-range tracking camera.

Immediately after launch, TV-#1(K) will move to the SLF Viewing Site. TV-#3(K) and TV-#5(K) will leave their launch coverage positions and move to the Press Site News Center to provide coverage of briefings, news conferences and other activities as required.

Flight Control coverage will be provided by MOCR #1 and MOCR #2 at JSC.

Direction and control of the Video Release Network will remain at KSC, incorporating JSC and WSMR/NS elements, until after it has been determined that it will not be necessary to return to the launch site to land or to abort the flight and land at WSMR/NS after once around the Earth.

Continuous coverage of the launch phase of the flight is expected to total approximately (TBD) hours.

3.4.2 FLIGHT OPERATIONS PHASE

3.4.2.1 Network Responsibility and Control

Responsibility for the PAO Video Release Network will shift from KSC to JSC during the first LOS after a nominal orbit is assured. The Executive Producer will depart the network control room when nominal operation of the Payload Bay Doors is assured. (TBD) will exercise control of the network when the Executive Producer is out of contact while in transit from KSC to JSC, and again while he is in transit to DFRC. Until such time as the Executive Producer can assume his responsibilities, the (TBD) will determine the selection of programming sequences and content.

3.4.2.2 Video Facilities, Equipment and Personnel

Control of the PAO Video Release Network at JSC will be located at the PAO Console in the Mission Operations Control Room. The facility will be designed, installed and maintained by Ford Aerospace under contract to the JSC

Ground Data Systems Division. New equipment purchases will be funded by coordinated DTMS and Shuttle Program funding. AV Corporation personnel will execute Video Release Network programming decisions under the supervision of the JSC Public Affairs Office.

Video Release Network activities at the PAO console will require three individually controllable program outputs from the MCC 525-Line Switcher to process 20 program sources as follows:

JSC Select - Sequenced output to the RCA Americom Earth Station, the Telco television link outbound from JSC, and, during the Flight Operations Mission Phase, to the JSC Broadcast Interface in Building 2. During Flight Operations, JSC Select and NASA Select are one and the same.

PAO-1 - Sequenced output to be displayed in the JSC News Center and Press Center in Building 2 and also made available at the JSC Broadcast Interface.

PAO-2 - Sequenced output routed to the JSC Broadcast Interface in order to distribute special program sources and other material not otherwise available at the interface.

Sequencing of flight operations coverage will utilize a total of four ground based and six orbiter cameras, four of which will be field sequential color and two monochrome.

Ground based cameras in the Mission Operations Control Room, provided by JSC Ground Data Systems Division under DTMS and Shuttle Program funding, will be:

MOCR #1 - Remote controlled minicam unit covering activities in the Mission Operations Control Room from rear locations.

MOCR #2 - Remote controlled minicam unit covering activities in the Mission Operations Control Room from front locations.

Other production sources will include:

Color Spacecraft Video - Facility which converts output of four orbiter field sequential cameras to color.

ID Code O - Field sequential camera located in the cabin.

ID Code 8 - Field sequential camera located in the cabin.

ID Code 7 - Field sequential camera located in the Cargo Bay on starboard side of the forward bulkhead.

ID Code 5 - Field sequential camera located in the Cargo Bay on the port side of the aft bulkhead.

ID Code 13 - Video cassette recorder, playback of video from four color and two B&W spacecraft cameras.

B&W Spacecraft Video - Output of two orbiter monochrome cameras:

ID Code 1 - Camera located in the Cargo Bay on the port side of the foward bulkhead.

ID Code 2 - Camera located in the Cargo Bay on the starboard side of the aft bulkhead.

PAO Return - Sequenced output of ground based cameras used to provide coverage of briefings, news conferences and other mission related activities.

TV-#6(J) - Studio camera located in the News Center briefing room.

TV-#7(J) - Camera located in the Press Center Auditorium. Note: TV-#6(J) and TV-#7(J) will be used to provide two camera coverage from either location when required. The cameras will be installed and operated by Taft contractor personnel and sequenced into Video Network coverage at the PAO Console in the Mission Operations Control Room.

TV-#8(J) - Minicam unit assigned to cover simulation and training activities in the Water Immersion Facility, the SAIL Simulator, the Shuttle Mission Simulator, the One-G Trainers, etc.

VTR Playback, Bldg. 8 - Output of six Video Release Network videotape recorders.

VTR Playback #1, Bldg. 30 - Output of Flight Operations videotape recorder.

VTR Playback #2, Bldg. 30 - Output of Flight Operations videotape recorder.

Clock - Mission time.

Displays - Mission status.

Special Effects Generator - Video effects.

Telewriter - Graphics and Captions.

RCA Americom - Unprocessed spacecraft video incoming via satellite from HAW, GDS and MIL GSTDN sites and Video Release Network supporting feeds from KSC and DFRC.

Telco - Unprocessed spacecraft video incoming via terrestrial link

from MAD GSTDN site and Video Release Network programming from WSMR/NS when Northrup Strip is configured for nominal landing.

Engineering video sources will include two frame synchronizers and a test signal/MCC identifier.

3.4.2.3 Distribution

NASA Select will flow from Building 30 to the RCA Americom JSC Earth Station for satellite relay service to the Kennedy Space Center, the Dryden Flight Research Center, the Goddard Space Flight Center and NASA Headquarters, AT&T CTO in Los Angeles and New York City.

NASA Select will flow through Building 8 to Building 2 for distribution throughout the News Center and the Press Center and to the Broadcast Interface.

In addition to the NASA Select video, broadcast users will have access to clean feeds of the individual JSC video sources routed through PAO #1 and PAO #2. MOCR #1, MOCR #2 and Mission Time Clock will be available direct to broadcast users.

3.4.2.4 Communications

The Executive Producer and the (TBD) will coordinate Video Release Network activities with the Director of Public Affairs, the STS Public Affairs Officer, the KSC, JSC, DFRC and MSFC Public Affairs Officers and other Headquarters and Center public affairs managers and supervisors on the PAO COORD circuit.

They will coordinate with the Audio Release Network and PAO Commentators on PAO CUE and PAO ENGINEERING.

The Executive Producer and the (TBD) will coordinate the planning, scheduling and release requirements for orbiter video with the STS TV Working Group on the VIDEO OPERATIONS voice circuit, and with the Flight Control Team on the MOCR TELEVISION circuits. Ground processing and handling of orbiter video will be coordinated with the MCC Television Support Team and the Center Operations Team on the MOCR TELEVISION circuit.

The (TBD), as Producer/Director of Video Release Network Flight Operations coverage, will implement Network programming plans and direct the activities of the Network staff on the VIDEO OPERATIONS and TELEVISION circuits.

The AV Corporation Technical Director will implement Network technical requirements, direct the activities of engineering and support personnel, and coordinate with other Centers on the PAO ENGINEERING and TELEVISION circuits.

The Executive Producer and the (TBD) will plan and exercise control of Video Release Network distribution activities on the VIDEO OPERATIONS circuit.

The principal media interface will be the (TBD) circuit.

3.4.2.5 Coverage Scenario

The PAO Video Release Network will operate on a scheduled basis during the Flight Operations phase of the mission.

The Network will be activated during periods when on-orbit video coverage will be relayed to JSC, when it is appropriate to repeat on-orbit coverage already received at JSC, and when major mission events, status reports or news conferences warrant such attention.

At all other times, Video Release Network activities will be confined to coverage of the Mission Operations Control Room and change of shift briefings for on-site distribution to the News Center, Press Center and Broadcast Interface at JSC.

Primary Flight Operations Phase network coverage will be sequenced with the output of the orbiter television system and the complement of ground-based cameras located at JSC. Secondary coverage will be provided by other Centers if it becomes necessary or appropriate to do so during the course of the mission.

On-orbit video coverage will be relayed to JSC as scheduled in the Crew Activities Plan, subject to planning revisions, as follows:

APPROX MET	EST	ACTIVITY
00/01:32-01:34	8:02 AM - 8:04 AM	Payload Bay Door latch tests, door tests, radiator deployment tests, opening and closing.(GDS).
00/01:37-01:43	8:07 AM - 8:13 AM	Continuation of above.(MIL).
00/01:53-01:57	8:23 AM - 8:27 AM	Continuation of above. (MAD).
00/07:57-08:01	2:27 PM - 2:31 PM	Pilot on mid-deck, preparing meal.(TBD)

APPROX MET	EST	ACTIVITY
00/12:25 - 12:32	6:55 PM - 7:02 PM	Commander and Pilot give status report on day's operations and compare STS vehicle and activities with previous launch systems. (TBD).
01/00:02-00:09	6:32 AM - 6:39 AM	Commander checks out flight control system. (TBD).
01/01:30-01:37	8:00 AM - 8:07 AM	Flight controllers in MCC check out ground controls for Payloard Bay cameras. Views of Payload Bay interior spacecraft exterior and Earth. (TBD)

Other flight operations and crew activities will be recorded on-board the orbiter and may be relayed to JSC as opportunities occur during the mission. Additional PAO Video Release Network programming will be scheduled as necessary to distribute such coverage.

Coverage of major mission events, status reports and news conferences will be planned and scheduled in real-time.

3.4.3 NOMINAL LANDING AND POST-LANDING OPERATIONS AT DFRC

3.4.3.1 Network Responsibility and Control

Responsibility for the PAO Video Release Network will shift from JSC to DFRC after the last pass over the Guam tracking station prior to landing. The Deputy Director of Public Affairs, as PAO Video Release Network Executive Producer, will exercise control of the network at DFRC and determine the selection of programming sequences and content.

3.4.3.2 Video Facilities, Equipment and Personnel

The PAO Video Release Network Control Room at DFRC will be located in Room 3000 B of the Administration Building. The facility will be designed, installed and operated by Taft Broadcasting under a JSC Center Operations support services contract. New equipment purchases will be funded by the JSC STS Program Office. Existing equipment will be requisitioned from JSC, KSC and DFRC inventories.

The Video Network sequencing switcher will have an input capacity of 20 sources.

Sequencing of approach and landing coverage will utilize a total of nine cameras. Six of these units, provided by JSC Center Operations with STS Program Office funding, will be designed and operated by Taft:

TV-#1(J) - Studio camera unit installed in van equipped with microwave transmitter.

TV-#2(J) - Minicam unit installed in van equipped with microwave transmitter.

TV-#3(J) - Minicam unit installed in van equipped with microwave transmitter.

TV-#4(J) - Minicam unit only.

TV Chase #1 - Minicam unit installed in chase aircraft equipped with microwave transmitter.

TV Helicopter - Minicam unit removed from backup chase aircraft and installed in an Air Force helicopter equipped with microwave transmitter for airborne coverage of landing site.

Two cameras will be provided by DFRC:

LRO - The DFRC Long Range Optics tracking camera required for range support.

TV-#1(D) - A minicam unit installed in a van equipped with a microwave transmitter and staffed by DFRC (TBD).

One camera will be provided by the Western Test Range:

Santa Ynez TV - An Air Force long range monochrome tracking camera located on Santa Ynez Peak.

Other production sources will include:

ACF Return - Output of six videotape recorders in the Audio Control Facility.

JSC Select - Terrestrial link for coverage of Mission Operations Control Room activities, status briefings and news conferences at JSC.

RCA Americom - PAO Video Release Network programming return from the satellite via Buckhorn ground station.

Engineering video sources will include a status clock, a test pattern, color bars and black.

3.4.3.3 Distribution

NASA Select, the output of the Video Release Network switcher, will flow to the RCA Americom Interface, DFRC Headquarters Building 4800. Primary distribution of the PAO Video Release Network via satellite will include the Johnson Space Center, the Kennedy Space Center, the Goddard Space Flight Center and NASA Headquarters, AT&T CTO in Los Angeles and New York City.

NASA Select will flow through the Audio Control Facility trailer to the Institutional Support Facility for distribution to six monitors in the DFRC Working Press Center, (TBD) monitors in the News Center, (TBD) in the Public Affairs offices, and 32 distribution amplifiers for the broadcast media covering the landing at DFRC.

NASA Select will also flow through (TBD) to a leased facility which will transmit it by microwave to monitors at the Guest Viewing Site and the Press Viewing Site.

In addition to the NASA Select video, broadcast users will have access to clean feeds of the key individual video sources. TV-#1(J), TV-#2(J), TV-#3(J), TV-#4(J), TV Chase/TV Helicopter, and LRO will each be released at the Institutional Support Facility on eight distribution amplifiers. TV-#1(D), Santa Ynez TV and JSC Select will be released on a time shared basis through a second switchable release circuit.

3.4.3.4 Communications

The Executive Producer will coordinate Video Release Network activities with the Director of Public Affairs, the STS Public Affairs Officer, the DFRC, JSC, KSC and MSFC Public Affairs Officers and other Headquarters and Center public affairs managers and supervisors on the PAO COORD circuit.

He will coordinate with the Audio Release Network and PAO Commentators on PAO CUE and PAO ENGINEERING.

He will coordinate with the OFT Manager on the OFT MANAGER circuit and with the TV Operations Coordinator and others as necessary on LANDING FIELD 1.

The Executive Producer will plan and exercise control of Video Release Network distribution activities on the VIDEO OPERATIONS circuit. His principal media interface will be the TV NETWORK COORDINATION circuit.

The Taft Producer/Director will implement Network programming plans and direct the activities of the Network production staff on the TV DIRECTOR circuit, which will extend to the mobile units and the lakebed TV Photo Coordinator by VHF 2-way radio. The Taft Technical Director will communicate with the airborne units on TV Chase and TV Helicopter on assigned VHF frequencies.

The Taft Technical Director will implement Network technical requirements, direct the activities of engineering and support personnel, and coordinate with other Centers, on the TV ENGINEERING, PAO ENGINEERING and TV CONFERENCE circuits.

3.4.3.5 Coverage Scenario

Primary landing site coverage will be developed with the complement of airborne, mobile and ground-based cameras located at DFRC and Santa Ynez.

JSC will continue to provide supporting coverage of the Mission Operations Control Room, status briefings and other activities as required during re-entry, landing, crew egress and the post-flight period. The local camera sources will be integrated at JSC, at the direction of the PAO Video Release Network producer at DFRC, and transmitted to DFRC via terrestrial circuit to be incorporated in the NASA Select programming.

Weather permitting, the Air Force long range monochrome tracking camera will provide the first view of the incoming orbiter. This coverage will begin approximately 10 minutes prior to landing, when the orbiter, at a ground speed of 6,500 MPH is at an altitude of 160,000 feet and a distance of 180 miles off shore. The Santa Ynez video will be transmitted to DFRC via terrestrial circuit and sequenced in the NASA Select programming as appropriate.

Approximately five minutes prior to landing, at an altitude of 80-100,000 feet, the orbiter will come within range of the Long Range Optics color camera at DFRC. This coverage will overlap with the first view of the orbiter from the TV Chase #1 airborne camera.

As the orbiter approaches Rogers Dry Lake, at an altitude of approximately 50,000 feet, it will come within view of the three mobile camera units. TV-#1(J) will be located on the lakebed, near the planned touchdown point. TV-#2(J) will be with the landing operations Convoy in a staging unit near the west edge of the lakebed. TV-#3(J) will be at the east edge of the lakebed. (See Attachment (1))

TV Chase #1 will continue to provide airborne coverage of the orbiter as it approaches the lakebed and lands. TV-#1(J), TV-#3(J) and the LRO camera will provide ground-based coverage of the approach and landing.

TV-#4(J) located on the DFRC Administration building, will provide support coverage of activities in that immediate area.

TV-(TBD) will provide intermittent coverage of the activities in the DFRC Flight Operations Control Room on a non-interference basis.

Vehicles in the landing operations Convoy will deploy to positions near the orbiter during rollout. TV-#2(J) will then begin to provide close-in coverage of the activities associated with preparations for crew egress.

When TV Chase #1 coverage ends, the Air Force helicopter will begin to provide general airborne coverage of the landing site and other nearby locations.

TV-(TBD) will move to (TBD) to provide coverage of activities at Edwards Ground Operations Control on a non-interference basis.

Safety considerations which govern vehicle movement and proximity to the orbiter will dictate that TV-#1(J) and TV-#3(J) remain at a distance during landing. Immediately after touchdown, TV-#3(J) moves to within 700' of the orbiter while TV-#1(J) continues coverage of the overall scene. TV-#2(J) will move in to become a hand-held, walk-around camera at the 700' radius. TV-#1 will then reposition to within 1,000' of the orbiter. (See Attachment (2))

In the event the orbiter lands at another location on the lakebed, TV-#2(J) will provide close-in coverage from the site as soon as the Convoy is deployed to the area. TV-#3(J) and TV-#1(J) will obtain Edwards Ground Controller clearance to move near the landing site through the TV Operations Coordinator and proceed to new locations determined by safety considerations and appropriate sun angles.

Approximately 45 minutes after nominal landing, all three cameras will provide coverage of crew egress, orbiter inspection and crew departure.

When the crew leaves the landing site, TV-#2(J) will accompany the van to the medical facility, providing coverage en route as appropriate. The arrival of the crew at the medical facility and activities there will also be covered by TV-#4(J)

TV-#3(J) will leave the lakebed after covering the crew departure and will then be the first unit available for coverage of status briefings, a post-flight news conference, crew activities, or other events as required.

TV-#1(J) will continue to provide coverage of activities associated with the orbiter while it remains on the lakebed and as it is towed to the DFRC hangar approximately 75-80 minutes after landing.

Sequencing of NASA Select video incorporating DFRC and JSC elements will continue until the orbiter has been removed from the lakebed, the crew has departed DFRC, and post-flight briefings and news conferences at both DFRC and JSC have been concluded. Continuous coverage of this phase of the flight is expected to total approximately four hours.

3.4.4 RETURN TO LAUNCH SITE ABORT AND LANDING

3.4.4.1 Network Responsibility and Control

Responsibility for the PAO Video Release Network will be retained at KSC. JSC will continue to provide supporting coverage from JSC as required.

The Executive Producer will exercise control of the network at KSC and will determine the selection of programming sequences and content.

3.4.4.2 Video Facilities, Equipment and Personnel

There will be no change in production facilities and personnel as described for nominal Pre-Launch Activities and Launch Operations except to delete WSMR/NS and DFRC coverage.

Shuttle Landing Facility video from KSC will be provided by Video Network mobile units as repositioned for RTLS coverage, TV Chase, and TV-#6 installed on the Mate/DeMate Device.

3.4.4.3 Distribution

Distribution as configured for nominal Pre-Launch Activities and Launch Operations will be retained.

3.4.4.4 Communications

Communication as configured for nominal Pre-Launch Activities and Launch Operations will be retained.

3.4.4.5 Coverage Scenario

Primary RTLS coverage will be produced with the complement of airborne, mobile and ground-based cameras located at KSC and Patrick AFB. JSC will continue to provide coverage of the Mission Operations Control Room, status briefings and other activities as required during the handing, crew egress and post-flight period. The local camera sources will be integrated at JSC, at the direction of the PAO Video Release Network Executive Producer at KSC, and transmitted to KSC via terrestrial circuit to be incorporated in the NASA Select programming.

The TV Tracker will re-establish coverage of the incoming orbiter at (TBD) feet, (TBD) miles off shore, at approximately (TBD) prior to touchdown.

Within (TBD) minutes, at an altitude of 30,000 to 40,000 feet, the orbiter will come within range of the TV Chase #1 airborne camera.

As the orbiter approaches the Shuttle Landing Facility, at an altitude of approximately (TBD) feet, it will come within view of TV-#1(K) and TV-#6(K) at the runway and TV-#4(K) on the VAB roof.

During rollout, vehicles in the landing operations convoy will deploy to positions near the orbiter. TV-#2(K) will then begin to provide close-in coverage of the activities associated with preparations for crew egress.

When the crew leaves the landing site, TV (TBD) will accompany the van to (TBD) and provide coverage from that location as required. TV (TBD)(K) , TV-#4(K) and TV-#6(K) will continue to cover the activities at the Shuttle Landing Facility until the orbiter it towed to the OPF.

TV-#3(K) and TV-#5(K) will provide coverage of briefings, news conferences and other activities at the Press Site News Center as required.

Flight control coverage will be provided by MOCR #1 and MOCR #2 at JSC, and post-flight briefings and news conferences will be covered by TV-#6(J) and TV-#7(J).

Sequencing of NASA Select video incorporating KSC and JSC elements will continue until the orbiter has been towed from the runway, the crew status has been established, and post-flight briefings and news conferences at both KSC and JSC have been concluded.

3.4.5 AOA LANDING AND POST-LANDING OPERATIONS AT NORTHRUP STRIP

3.4.5.1 Network Responsibility and Control

Responsibility for the PAO Video Release Network will remain with KSC through landing and post-landing operations. The Executive Producer at KSC will exercise control of the network and determine the selection of programming sequences and content.

JSC will provide supporting coverage of flight control activities, briefings and news conferences at JSC.

3.4.5.2 Video Facilities, Equipment and Personnel

Video Network Control will be retained at KSC as configured for Launch Operations coverage. Coverage at JSC will remain the same as for Launch and Flight Operations.

Video sources at the Northrup Strip landing site will include:

TV-#3(J) - JSC minicam unit installed in van equipped with microwave transmitter, assigned to WSMR/NS from DFRC on standby for AOA coverage.

TV-#5(J) - Minicam unit installed in van.

TV Chase #2 - JSC minicam unit installed in chase aircraft equipped with microwave transmitter, assigned to WSMR/NS from DFRC on standby for AOA coverage.

One source will be provided by White Sands Missile Range:

TV Tracker - Radar directed monochrome camera with telescopic lens.

WSMR/NS video sources will be switched by a Taft Producer/Director in TV-#5(J) and routed via terrestrial circuit to KSC to be incorporated into the NASA Select PAO Video Release.

JSC switching responsibilities will remain the same as for Launch Operations coverage.

3.4.5.3 Distribution

Distribution will remain as configured for Launch Opeations coverage.

3.4.5.4 Communications

Communication will remain as configured for Launch Operations sequencing. The Video Operations circuit will be restricted to communications between the Executive Producer at KSC and the Producer/Director at WSMR/NS.

3.4.5.5 Coverage Scenario

Primary AOA landing site coverage will be produced with the complement of airborne, mobile and ground-based cameras located at Northrup Strip. JSC will continue to provide supporting coverage of the Mission Control Center, status briefings and other activities as required during the landing, crew egress and post-flight period.

The TV Tracker will establish coverage of the incoming orbiter at (TBD) feet, (TBD) miles out, approximately (TBD) prior to touchdown.

Rendezvous with TV Chase, at an altitude of (TBD) feet, will occur (TBD) prior to touchdown.

As the orbiter approaches Northrup Strip, at an altitude of approximately (TBD) feet, it will come within view of TV-#3(J) and TV-#5(J) operating near the planned touchdown point.

After rollout, TV-#3(J) will move to a position near the orbiter to provide close-in coverage of the activities associated with preparations for crew egress and will remain there to cover egress and crew departure.

When the crew leaves the landing site by helicopter for Holloman AFB, coverage from the landing site will conclude except for such operational requirements as may be developed at the time.

3.4.6 NOMINAL LANDING AND POST-LANDING OPERATIONS AT WSMR/NS

3.4.6.1 Network Responsibility and Control

Responsibility for the PAO Video Release Network will shift from JSC to WSMR/NS after the last pass over the Guam tracking station prior to landing. The Deputy Director of Public Affairs, as Executive Producer, will exercise control of the network at WSMR/NS and will determine the selection of programming sequences and content.

3.4.6.2 Video Facilities, Equipment and Personnel

Elements of the Video Release Network capability established by JSC at DFRC will be relocated to WSMR/NS as required for Network operations and coverage there.

The sequencing facility will be housed in the TV-#5(J) trailer located at Northrup Strip. The coverage of approach and landing will be switched at the WSMR/NS facility and routed by terrestrial circuit via Los Angeles to the RCA

Americom South Mountain Earth Station for Video Release Network satellite distribution.

Approach and landing coverage will utilize a total of (TBD) cameras installed and operated by Taft Broadcasting under JSC Center Operations support services contract:

TV-#1(J) - Studio camera unit installed in van equipped with microwave transmitter.

TV-#2(J) - Minicam unit installed in van equipped with microwave transmitter.

TV-#3(J) - Minicam unit installed in van equipped with microwave transmitter.

TV-#4(J) - Minicam unit.

TV-#5(J) - Studio camera located near the Northrup Stip runway intersection.

TV Chase #1 - Minicam unit installed in chase aircraft equipped with microwave transmitter.

TV Helicopter -Minicam unit removed from back-up chase aircraft and installed in an Air Force helicopter equipped with microwave transmitter for airborne coverage of landing site.

One camera will be provided by White Sands Missile Range:

TV Tracker - Radar directed monochrome camera with telescopic lens.

Other video sources will include:

JSC Select - Terrestrial link for coverage of Mission Operations Control Room activities status briefings and news conferences at JSC.

VTR Playback - Output of (TBD) videotape recorders located in the production trailer.

Engineering video sources will include (TBD).

3.4.6.3 Distribution

NASA Select, the output of the PAO Video Release Network, will originate at TV-#5(J). Video sources at WSMR/NS will be integrated there and routed to Los Angeles via terrestrial circuit to be distributed via RCA Americom satellite to the Johnson Space Center, the Kennedy Space Center, the Dryden Flight Reseach Center, the Goddard Space Flight Center and NASA Headquarters, AT&T CTO in Los Angeles and New York City

Distribution at WSMR/NS will be limited to (TBD).

3.4.6.4 Communications

(TBD)

3.4.6.5 Coverage Scenario

(TBD)

3.5. IMPLEMENTATION PLAN FOR VOICE COMMUNICATION

The Public Affairs Voice Communication Network will employ four duplex circuits for the management and coordination of Audio and Video Release Network operations during orbital flight tests.

The circuits will be funded, acquired, installed and maintained as elements of the STS Operational Voice Communications System. Configuration and access requirements will be identified and defined as described below and submitted to the STS Intercenter Communications Working Group for implementation by (TBD) at JSC.

3.5.1 Network Configuration

Public Affairs Voice Communication Network circuits will be identified, defined and configured as described in Attachment (3).

3.5.2 Access

Authorization for access terminations on these circuits will be based upon the requirements validation processes of the interorganizational STS Support Requirments Management and Documentation System contained in NMI 8610.10. Access will be controlled in accordance with NMI 8610.10, Control of Access to Operational Voice Communications Circuits - Space Shuttle Program.

Initial network termination requirements will be determined, stated and authorized by the Public Affairs Telecommunications Working Group. Requests for access not authorized at the initial network configuration must be submitted to the Headquarters Public Affairs Officer, Space Transportation Systems, for review and approval by the STS Public Affairs Telecommunications Working Group prior to documenting the requirement in the interorganizational or intraorganizational requirements documentation system. Only properly validated and documented requirements for access will be approved and implemented.

In no case will termination requirements be approved for unsupervised locations which are frequently unattended in the absence of Public Affairs personnel with assigned dissemination responsibilities or which might otherwise provide unauthorized access to the Public Affairs Voice Communication Network.

Authorized circuit terminations will be published as Appendix (TBD) of this plan. The Chairman of the STS Public Affairs Telecommunications Working Group will maintain, update, and distribute current documentation of authorized access terminations as necessary for both internal and external publication.

3.5.3 Discipline

The Public Affairs Voice Communications Network will be used for STS-1 operational Public Affairs communications. It will not be used as an alternate to the FTS system for routine communications.

Call signs will be assigned to all stations on the network and to key personnel. Only listed call signs will be used.

Voice communications will be disciplined to assure efficient utilization and eliminate unnecessary traffic which would create confusion during time-critical operations.

The use of PAO COORD will be prioritized as follows for the purpose of restricting traffic during critical activities:

PRIORITY 1	Director, Hqs Public Affairs Division STS Public Affairs Operations Manager Executive Producer, PAO Video Release Network DFRC Director of Public Affairs JSC Director of Public Affairs KSC Director of Public Affairs MSFC Director of Public Affairs Launch/Mission Commentator
PRIORITY 2	All Above plus: DFRC News Center Manager JSC News Center Manager KSC News Center Manager MSFC News Center Manager
PRIORITY 3	All Authorized Users

PRIORITY 1 Conditions automatically prevail T-5 minutes through ET SEP, during contingencies (including all abort modes), entry interface through landing rollout and at other times when declared by the STS Public Affairs Operations Manager.

PRIORITY 2 may be invoked by any party listed in that category.

PRIORITY 3 prevails at all other times.

During periods of high activity, the commentator may elect to drop off PAO COMM and/or CUE circuits in order to adequately monitor LCC/MOCR and air/ground loops essential to his understanding of missions events. The AD on the console will screen all traffic intended for the commentator, handling to a conclusion those matters over which he has control or knowledge and relaying messages to the commentator when appropriate.

The use of PAO CUE will be prioritized as follows for the purpose of restricting traffic during critical activities:

PRIORITY 1	PAO Commentators Executive Producer, PAO Video Release Network Audio Release Network Technical Directors
PRIORITY 2	Support Staff

Friority 1 conditions will automatically prevail when the Audio Network is in a release mode.

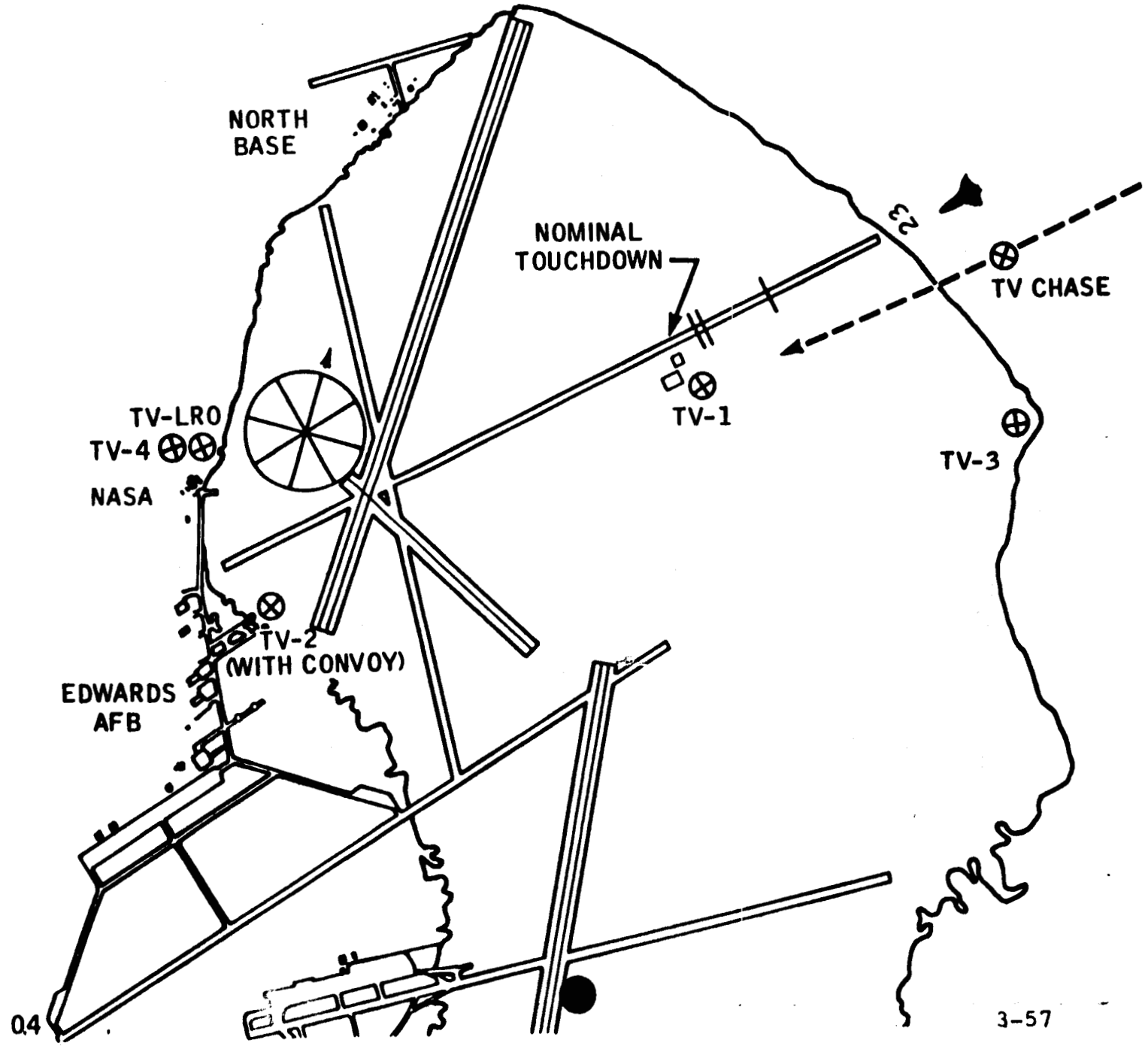
The use of VIDEO OPERATIONS will be prioritized as follows for the purpose of restricting traffic during critical activities:

PRIORITY 1	Executive Producer, PAO Video Release Network PAO Commentators STS TV Working Group Chairman Video Network Producers, Directors and Technical Directors
PRIORITY 2	Support Staff

Priority 1 conditions will automatically prevail when the Video Network is in a release mode.

Attachment (1).

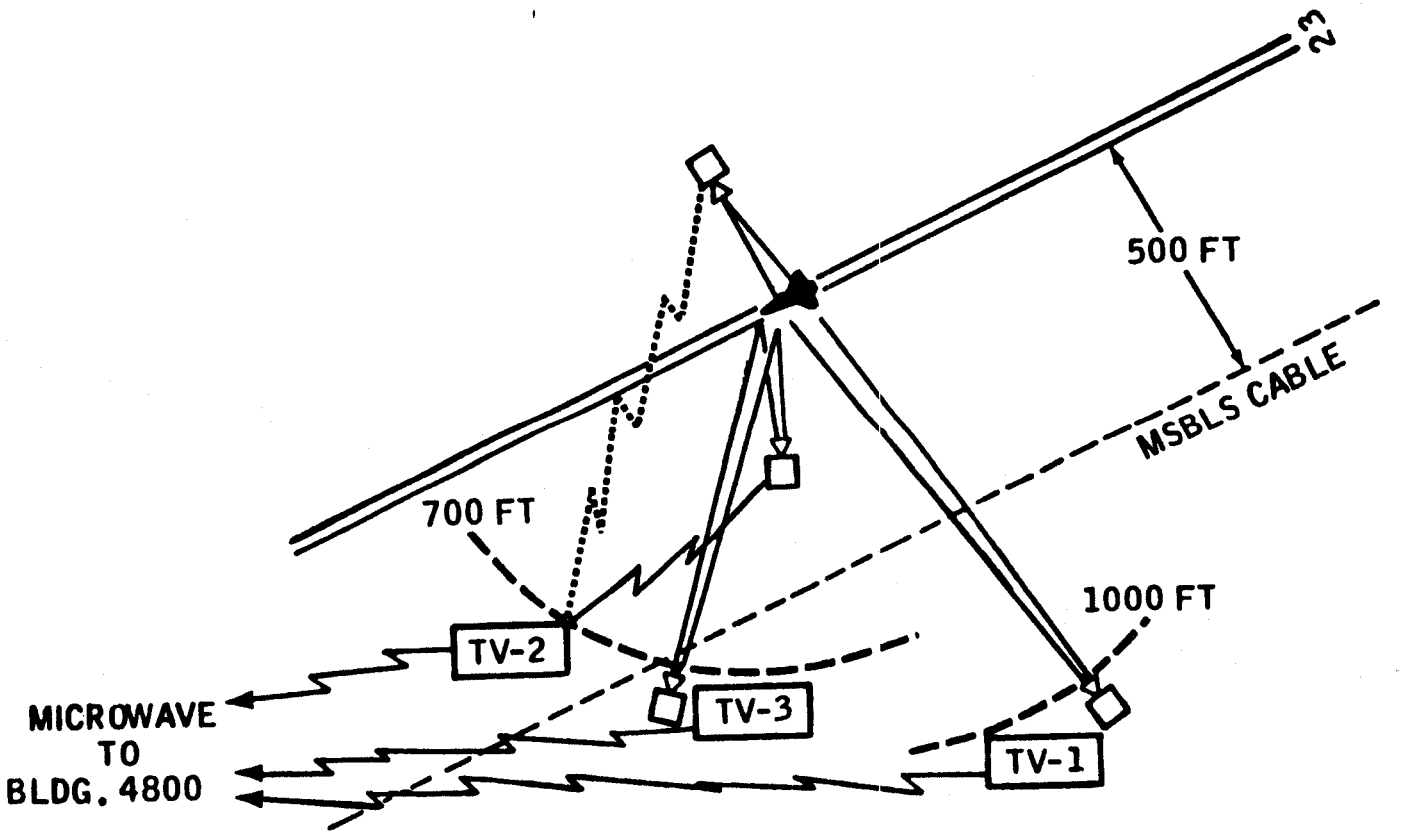
TELEVISION CAMERA DEPLOYMENT
LANDING



Attachment (2)

TELEVISION CAMERA DEPLOYMENT

NEAR ORBITER



3-35

Attachment (3).

Circuit #	Identification	Purpose	Configuration
I - 040	PAO COORD	Real-time planning and coordination of Audio and Video Release Network activities by the Director of Public Affairs, the STS Public Affairs Officer, Center Public Affairs Officers, PAO Commentators, the Video Release Network Executive Producer and other Public Affairs managers and supervisors as assigned for STS-1.	Headquarters, KSC, MSFC, JSC, DFRC, WSMR/NS. Console positions of those involved when on duty at mission status locations; offices and conference rooms of those involved when not on duty at mission status locations.
I - 092	PAO CUE	Implementation and coordination of Audio and Video Release Network activities by the PAO Commentators, Executive Producer, and support personnel as assigned for STS-1.	KSC, JSC, DFRC, WSMR/NS. Console positions of those involved when on duty at mission status locations; working locations of support personnel when on duty as assigned for STS-1.
I - 051	PAO ENGINEERING	Planning, implementation and coordination of Audio and Video Release Network technical activities, management and maintenance of circuits and facilities by supervisory and support personnel as assigned for STS-1.	KSC, JSC, DFRC, WSMR/NS. Console positions of those involved when on duty at mission status locations; working locations of supervisory and support personnel when not on duty at mission status locations.
I -TBD	VIDEO OPERATIONS	Planning, directing and controlling of Video Release Network operations, coverage, sequencing and distribution by the Video Release Network Executive Producer and staff, the STS TV Working Group and the TV Operations Coordinator.	KSC, JSC, DFRC, WSMR/NS. All office and console positions of the Executive Producer and STS TV Working Group Chairman, and console positions of those directly involved when on duty at mission status locations.

4.0 PROTOCOL OPERATIONS

4.1 FOREWORD

The guest operations will require Public Affairs to support major guest activities at KSC for launch and landing at DFRC and - in later missions - eventually KSC landings. Staffing and logistics for a contingency also will be required at White Sands Missile Range (WSMR), in the event of either mission abort or an end-of-mission recovery.

4.2 GUEST ACTIVITIES

This plan covers guest activities for the scheduled STS-1 launch at Kennedy Space Center, landing at Dryden Flight Research Center, and alternate landings at KSC and White Sands Missile Range. With at least 30 days notice NASA will establish a guest operation center at WSMR.

Beginning with STS-1, an agency-wide program for handling NASA guests will be in effect. It will be staffed by Public Affairs Protocol Officers from KSC, JSC, DFRC, MSFC, and augmented by non-P.A. staffing with overall coordination by Headquarters Public Affairs.

The plan calls for the invitation and accommodation of the following guest categories for launches and landings.

4.2.1 DISTINGUISHED GUESTS

1. A select group of White House, Congressional, International, Cabinet, DOD and other federal officials to be invited by the Administrator to fly on NASA-chartered aircraft to KSC, observe the launch, then to JSC and then to DFRC (or White Sands) for the landing. A tour and briefing will be included at KSC, JSC and DFRC. Except for NASA-furnished transportation, guests will participate at their own expense.

2. KSC only - need decision on number.

3. DFRC only - fly from LA? bus? other?

4.2.2 SPECIAL GUESTS

Headquarters nominees (guests of the Administrator and Deputy Administrator), primarily individuals nominated for invitation by the associate administrators and the directors of the NASA centers.

Associate administrators and center directors will be assigned a quota for each launch and recovery. Their guest nominations will be submitted in advance to Public Services Branch for compilation into a Master Invitation List maintained at NASA Headquarters. (See 4.5, Timeline.)

All special guests will be given the option of attending the launch and landing and it is anticipated that acceptances may tend to follow geographic

lines, i.e.: eastern U.S. for the launch and far west for the landing. There may be many who will attend both.

All guests will be invited by the Administrator and the National Aeronautics and Space Administration. The mailing will include a printed invitation, a mission summary and a RSVP card. Special guests will be instructed to check into NASA Guest Services Center, at Cocoa Beach in Florida and/or the Antelope Valley Convention Center in Lancaster, California. Special guests will also be given the opportunity to tour and receive a briefing.

NASA will accommodate 3,000 special guests at KSC for launch and 2,000 for the DFRC landings.

An invitation is defined as for one individual to view the launch and/or landing.

NASA-furnished bus transportation will be provided for distinguished guests from the Guest Information Center to the viewing sites for both the launch and landing. However, special guests may elect to drive their own vehicles to public viewing sites.

4.2.3 GENERAL PUBLIC

1. (Launch) Guests who provide their own transportation to the Kennedy Space Center and who may be accompanied by friends or relatives, including children of any age, will be accommodated at the following viewing sites:

South Parkway -1,200 cars and 100 buses and oversized vehicles for a total of 10,000 viewers.

Causeway -5,000 cars and an estimated 25,000 people.

Swartz Road -100 buses only for charter groups - 5,000 people.

2. (Landing) The public viewing site will be located on the east side of the dry lake bed. Up to forty thousand vehicles can be parked in that area. Most vehicle passes for the launch and landing will be mailed in advance. However, late requests for permits will be handled at the Guest Services Center in Lancaster, a satellite office in Bakersfield, and at the main gates at Edwards AFB.

4.2.4 CONTRACTORS

In accordance with and concurrence by the Space Shuttle Program Office, the following ground rules and contractor guest allocations have been formulated.

4.2.5 EMPLOYEES AND DEPENDENTS

NASA and contractor employees and dependents will be accommodated as follows:

Launch: KSC has been allocated 3,000 vehicle permits for issuance to its employees and to other NASA and contractor personnel who are on temporary duty or leave status. The Causeway and Parkway Viewing Sites are the primary viewing site for employees, dependents and the general public.

Landing: NASA employees will view the landing from a site on the west side of the dry lake bed at Edwards Air Force Base.

GROUND RULES

1) 300 total contractor guests.

2) Major prime contractors are to invite contractors roughly in proportion to make or buy ratio.

3) Each Center will be responsible for inviting their support contractor guests.

4) Rockwell International Space Division and Rocketdyne will be given a corporate allocation of 200 guests.

5) Solid Rocket Booster (SRB) is to be considered one prime contractor with six sub-contractors.

CONTRACTOR GUEST ALLOCATIONS

RI/SD Rocketdyne	200
Martin/Marietta (ET)	50
SRB	50
Thiokol	20
MDAC	10
USBI	8
Bendix	4
Pioneer	4
Sundstrand	4

CONTRACTOR BUSES (MAXIMUM ALLOCATION)

RI/SD & Rocketdyne	10
Thiokol	2
Martin/Marietta	2
USBI	2
MDAC	1
IBM	1
Lockheed	1
Hamilton Standard	1
Honeywell	1
TRW	1
Grumman	1
General Dynamics?	1
Vought	1
P.R.C.	1
Boeing	1

Total of 27

4.3 SPECIAL GUEST INVITATIONS FOR LAUNCH AND LANDING

STS CENTERS		
	KSC	300
*	JSC	300
	MSFC	200
	DFRC	200
STS CONTRACTORS		300
HEADQUARTERS OFFICES		
	**L	1000
	B	50
	C	325
	D	25
	E	75
	H	25
	M	150
	N	50
	P	25
	R	75
	S	75
	T	50
	U	175
	W	50
	O	150
NON-STS CENTERS		
	Ames	50
	GSFC	50
	JPL	50
	LaRC	50
	LeRC	50
	WFC	50
	NSTL	50
		4,000

* Includes Astronaut Guests

** Absorbs International Affairs, DOD Affairs, Public Affairs, Government and Industry Affairs , University Affairs, and Special Groups which include NASA Advisory Council, STS Executives, Aerospace Advisory Group and the Aerospace Awareness Group (formerly MFA).

4.4 PUBLIC GUEST ALLOCATION FOR LAUNCH AND RECOVERY

LAUNCH	CAUSEWAY VIEWING SITE	PARKWAY VIEWING SITE	RECOVERY	DFRC PUBLIC VIEWING SITE
KSC	*3,000	100		
JSC	**300	100		40,000 vehicles
MSFC	200	100		
DFRC	150	100		
HEADQUARTERS OFFICES				
L	550	325		
B	25	25		
C	250	200		
U	50	100		
G	25	---		
H	25	---		
M	100	100		
N	25	---		
O	25	25		
R	25	---		
S	25	---		
T	25	---		
E	25	25		
NON-STS CENTERS				
Ames	25	---		
GSFC	25	---		
JPL	25	---		
LaRC	25	---		
LeRC	25	---		
WFC	25	---		
NSTL	25	---		
	5,000	1,200		

* KSC & NASA dependents (Vehicle Pass for Gate 1) East Causeway—3,000 vehicles.
Remaining 2,000 vehicles enter thru Gates 2 & 3 and will be primarily general public who will view launch from West Causeway. (All 5,000 vehicles will be limited to station wagons, vans and family size vehicles.) Mobile homes, campers, trailers and buses will be directed to south parkway.
For Lake Bed Viewing Area general public there is no limit on the number of nominations.

** Includes quota for Astronaut Office.

4.5 PROPOSED TIMELINE

The proposed timeline is based on a mission occuring during or after fourth quarter of 1980:

Launch minus 120 days	Guidelines and quota memorandum to Headquarters and field installations and principal hardware contractors.
Launch minus 90 days	Deadline for submission of special guest nominations to Headquarters Public Services Branch (LFF-12).
Launch minus 60 days	Mailing of printed invitations to special guests. RSVP no later than T-30 days.
Launch minus 30 days	Mail vehicle passes for launch and landing.
Launch minus 30 days	Letter of invitation from Administrator to selected group of distinguished guests to attend the launch and landing.

4.6 LAUNCH SLIPPAGE AND HOW GUEST OPERATIONS ARE AFFECTED

As a matter of practice, all guests will be advised of the potential for launch slippage and postponement.

The possibility of delays is spelled out in the invitations and accompanying information and vehicle passes. It will be incumbent on all guests (special, general public and NASA employees) to stay informed of launch-related developments.

Guests will be instructed to call the recorded status report lines operated at NASA Headquarters, and all STS centers for information and launch status before making final travel arrangements.

In addition, guests will be urged to look to the media for late-breaking developments concerning the launch and landing. All credentials issued will remain valid until completion of the event - launch or landing.

Distinguished guests only will be notified by phone immediately of any changes in the launch schedule. There will be an established system to remain in touch with these individuals to keep them advised of new schedule.

The motels holding blocks of rooms for the Administrator's distinguished guests for launch, mission and landing, do so with the understanding that there is always the possibility of a delay or a cancellation and rescheduling. In the event that motels in the immediate launch and landing areas are unable to provide required rooms for the new launch/landing dates, arrangements will be made to move the distinguished guests to motels in larger metropolitan areas, i.e., Orlando and Los Angeles.

Guests would then be transported by plane directly to KSC or Edwards AFB and then bused to the viewing sites.

Guest centers at launch, mission, landing and contingency sites will continue to operate and assist guests in the immediate hours following the announcement of a delay or postponement. For day-to-day slips, TDY personnel will remain on duty. If postponed, guest operations will close down and re-open at an appropriate time before the new launch date - usually three days.

4.7 GUEST ACTIVITIES - KENNEDY SPACE CENTER

4.7.1 PROTOCOL CONTROL CENTER

The Protocol Control Center will be located at the KSC Headquarters Building beginning T-5 days, and will function as a coordinating point for guest operations including distinguished guest status, logistics and airplane arrivals. Staffing positions will include:

Position	Name	Inst.	Report
Manager	Arnold Richman	KSC	T-5
NASA Headquarters	Jeanne Gober	HQS	T-5
Special Groups Coordinator	Darleen Hunt	KSC	T-5
Transportation	To be determined	KSC	T-5
Educational Services	Ray Corey	KSC	T-5

4.7.2 GUEST SERVICES CENTER

A Guest Services Center will be established beginning T-3 days in Cocoa Beach to assist guests, issue credentials and resolve problems.

It will be staffed by Headquarters Public Affairs personnel and representatives from the STS centers as well as representatives from the Office of Legislative Affairs and International Affairs Division. The Cocoa Beach facility will accommodate special guests and special groups, and handle requests for vehicle passes.

4.7.3 STAFFING:

Position	Name	Inst.	Report
Manager	Bill Taylor	KSC	T-5
Assistant Manager	To be determined	HQS	T-5
Office of Legislative Affairs Representative	To be determined	HQS	T-5
International Affairs Division Representative	To be determined	HQS	T-5
DOD Affairs Division Repesentative	To be determined	HQS	T-5
Receptionists - 6 clerks/secretarial (badging)		MSFC- 1 KSC - 3 JSC - 1 HQS - 1	T-5
JSC Public Affairs Rep. & secretary to coordinate Astronaut Office requirements	Bill der Bing Secretary from Astronaut Office	JSC	T-5
MSFC Public Affairs Rep. & secretary	Ed Schorsten & Secretary to be determined	MSFC	T-5

4.7.4 VISITORS INFORMATION CENTER (VIC)

A guest Courtesy Information Desk will be staffed by KSC personnel (to be determined) beginning T-3 days between the hours of 8:30 a.m. and 5:00 p.m. to furnish guests with launch information, etc.

The VIC will be will be open only to NASA guests on launch day. Continuous briefings will be conducted in the facility's two theaters. It will close to the general public at 5:00 p.m. T-1 night and the main building, with its two theaters, will function as a briefing facility for distinguished guests. An Administrator's reception and buffet will follow.

4.7.5 GUEST VIEWING SITES

1. Firing Room #4, Launch Control Center

This viewing site will be restricted to the 150 Administrator's Distinguished Guests, who will have the opportunity to view the launch from the firing room or roof of the LCC. The following will be available:

a. Coffee

b. Telephone (867 prefix)

c. Point-to-point telephone connecting with Barge Terminal Guest Site.

d. NASA video and audio release.

2. Barge Basin Terminal Site

This site will be restricted to 3,000 distinguished and special guests. Available at this site will be the following:

a. Bleacher seating

b. Parking area for 60 buses and 50 cars.

c. Public address system, microphone for all on-site announcements, switching capability to provide NASA audio release through orbital insertion.

d. Portable toilets in separate groups for men and women.

e. Five (5) telephones (867 prefix) located at the Site Information Center.

f. Point-to-point telephone connecting with LC-39 press site.

g. Point-to-point telephone connecting with PAO console in Operations Management Room (Control Room #1).

h. Telephones connecting with LCC and other viewing sites.

i. Ambulance and first aid services and traffic control.

j. Food service and souvenir sales.

k. Special bleacher security, appropriate signs and control ropes.

3. Swartz Road Viewing Site

This site, located southwest of Launch Complex 39A, one-half mile south of the press site, will accommodate groups using charter buses. It has the capacity for 100 buses and 5,000 people.

4. Parkway Viewing Site

This is the prime guest (including family members and friends) viewing area. It extends along a stretch of Kennedy Parkway, accommodates 1,200 cars, 1,000 oversize vehicles and an estimated 10,000 people. Admission is by the proper NASA placard displayed in the windshield of guests' vehicles.

Portable toilets, NASA audio release with local public address input, traffic control, and food service will be available.

5. NASA Causeway Viewing Site

This site is primarily for NASA dependents and general public who cannot be accommodated on the Parkway. Display of Causeway Vehicle Pass will admit vehicles. The capacity at this location is 5,000 cars and 25,000 people.

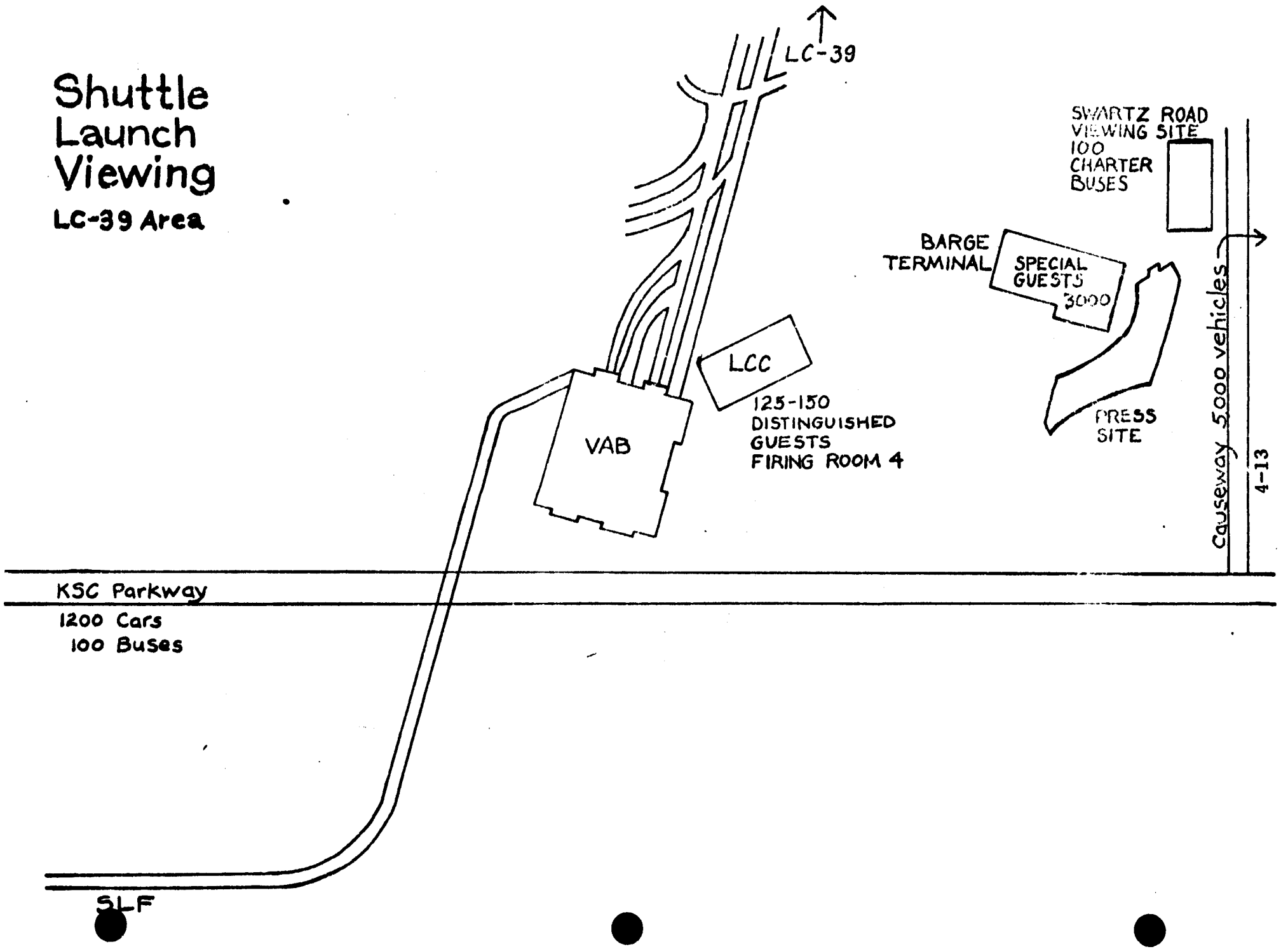
This site will be equipped with the same services as the other viewing areas.

6. Special Site

Astronauts and members of their immediate families (approximately 100 people) will be located in this area. The following will be available here: Two portable toilets, NASA audio and video release, television, traffic security and telephone.

Shuttle Launch Viewing

LC-39 Area



4.7.6 PRE-AND POST-LAUNCH TOURS AND BRIEFINGS

DISTINGUISHED GUESTS:

Distinguished guests of the Administrator will tour KSC immediately following launch and announcement that OV-102 is in orbit.

SPECIAL GUESTS:

Each guest receiving a special guest invitation will have the opportunity to indicate on RSVP whether they desire a pre- or post-launch tour and Space Shuttle briefing, which will be scheduled beginning T-3 days and continuing through launch day.

Briefings will be conducted in the KSC Training Auditorium and the VIC. Because of security and safety restrictions in the VAB and LCC, these areas may be excluded from the special guest tour route.

GENERAL PUBLIC

Guests and NASA dependents with vehicle passes will be encouraged to take the TWA Services tour of the Space Center prior to the launch or T+1. The Visitors Information Center (VIC) will be closed to the general public on launch day.

4.7.7 LAUNCH CONTINGENCY PLANS

1. HOLDS OF LESS THAN ONE HOUR:

All guests will remain at viewing sites.

2. POSTPONEMENT:

Invitation and vehicle passes remain valid and are automatically extended for the rescheduled launch date.

3. EMERGENCY SITUATION:

Director of KSC Public Affairs will direct the evacuation of viewing sites in accordance with safety and security instructions provided in real time.

4.8 GUEST ACTIVITIES - JOHNSON SPACE CENTER

Following launch, the JSC Public Affairs representative* assigned to KSC to assist with guest operations will assume the role of coordinator for the flight of the Administrator's charter aircraft from KSC to JSC. He will fly aboard the aircraft and will be assisted by two other JSC Public Affairs staffers when the plane lands at Ellington AFB. Buses will transport the distinguished guests to a motel (to be determined) where they will have been pre-registered. The group will visit JSC Mission Control later in the day where they will receive an update and mission status.

The Administrator will host a reception and buffet dinner that evening.

The following morning, guests will depart the motel at mid-morning for a tour of the Johnson Space Center and then depart for Ellington. A noon departure is planned with lunch served during the flight to Palmdale.

Public Affairs Support Staffing at JSC:

Coordinator:	Jack Waite
Special Guests & Program Coordinator:	Bill der Bing*
Protocol Assistant:	Juanie Smith

4.9 GUEST ACTIVITIES - DRYDEN FLIGHT RESEARCH CENTER

4.9.1 GUEST SERVICES CENTER

NASA will operate a Guest Services Center at the Antelope Valley Convention Center, located at 44055 North Sierra Highway, Lancaster. The facility will open T-3 days prior to launch. The center is divided into four areas:

(1.) Lobby

(2.) Sierra West

(3.) Sierra Centre

(4.) Sierra East

This facility will (1) function as a coordinating office for lodging and transportation of the Administrator's distinguished guests (2) receive and badge special guests (3) distribute vehicle passes to the general public (4) provide a briefing display and exhibit area featuring scale models of Shuttle and carrier aircraft.

All guests will be greeted by a receptionist in the lobby area. Special guests will be directed to the Sierra West which will be used by Protocol personnel as a control center for the badging of special guests.

Special guests will be furnished a schedule of landing-day activities, including bus departure time, mission status, etc. They will also be invited to step next door into the Sierra Centre which will be set with displays and exhibits, movies and briefings. This area may be used for a social function, such as an Administrator's reception, buffet and status briefing the evening of T-1 landing.

The Sierra East room will be used as a holding area for bus drivers, escorts, briefers.

There is ample parking in the lot adjacent to the convention center for the charter buses being used to transport distinguished and special guests to the landing site.

A large block of rooms, including all 50 in the new north wing of the convention center, have been reserved for Administrator's guests.

4.9.2 STAFFING

Guest Center Staffing will include these positions:

Position	Name	Inst.	Report
Director, Guest Activities	Chuck Biggs	JSC	T-5
Dryden Protocol Manager	Roger J. Barnicki	DFRC	T-5
North Base Guest Viewing Site Coordination	Arnold Richman	KSC	Launch + 8 hrs.
Logistics/Transportation Coordinator	To be determined	DFRC	T-5
Office of Legislative Affairs Representative	To be determined		
International Affairs Division Representative	To be determined		
Protocol Assistant	Stella Luna	JSC	T-5
Vehicle Pass Distribution	To be determined	DFRC	T-5
Clerical/Secretarial 4-6 (Badging)		DFRC	
Distinguished Guests Coordinator	Gene Marianetti	HQS	Launch + 8 hrs.
Special Groups Coordinator	Bill Taylor	KSC	Launch + 8 hrs.

4.9.3 TOURS AND BRIEFINGS

If conditions merit and the distinguished and special guests desire it, a tour of the DFRC-Edwards hangar complex can be scheduled following the landing.

4.9.4 LANDING VIEWING SITES

NORTH BASE VIEWING SITE A

Distinguished and special guests will be transported by bus the morning of landing from the Guest Services Center and other locations in Lancaster and Palmdale to Site A. This site will be limited to 2,000 distinguished and special guests. This site will feature four parawing (tent-like structures) equipped with the NASA audio and video release. Drinking water and portable comfort stations will be available.

NORTH BASE VIEWING SITE B

This site will accommodate charter groups and contractors providing their own transportation to a location adjacent to and approximately 200 yards east of Site A on the edge of the lake bed. Upwards of 100-150 buses can be easily handled at this location. NASA audio release, drinking water, and portable comfort stations will also be available at this site.

4.9.5 PUBLIC VIEWING SITE

DFRC will notify the Air Force Flight Test Center (AFFTC) that NASA proposes to issue 30,000 vehicle passes for a site located at the east edge of the dry-lake bed area.

Depending on interest, an additional 10,000 vehicle passes will be available at the Guest Services Center prior to landing.

Vehicle passes and related guest information will also be available for distribution at the NASA Guest Services Center in Lancaster and a satellite distribution center in Bakersfield, beginning three days prior to launch.

Vehicle passes will be honored at Edwards 48-hours prior to landing. This will provide adequate time for vehicles to enter the base once the Space Shuttle has been successfully launched and is in orbit.

General public traffic will be channeled away from Edwards main entrances (West and North Gates). Those vehicles entering from the West will be routed to 120th Street East and those from the North to Rich Road.

Routing of general public traffic will assure access by program personnel, distinguished and special guests and press.

Temporary gates, operated by Air Force personnel, will be located at base perimeters, preventing backup traffic.

The Public Viewing Site will have drinking water, portable comfort stations, restraining barriers, ropes and stanchions for crowd control.

As was done during the Approach and Landing Tests (ALT), local radio stations will carry the NASA audio release as a public service. Broadcast information will be furnished to guests along with the vehicle pass and other handout material.

These other services have been arranged:

a. The State Office Emergency Services (OES) will furnish three vans to be used as a Command Center for Traffic Control and Emergency agencies. These vans will be located north of Rosamond.

b. Law enforcement agencies will have three helicopters available for emergency use during OFT for off-site locations.

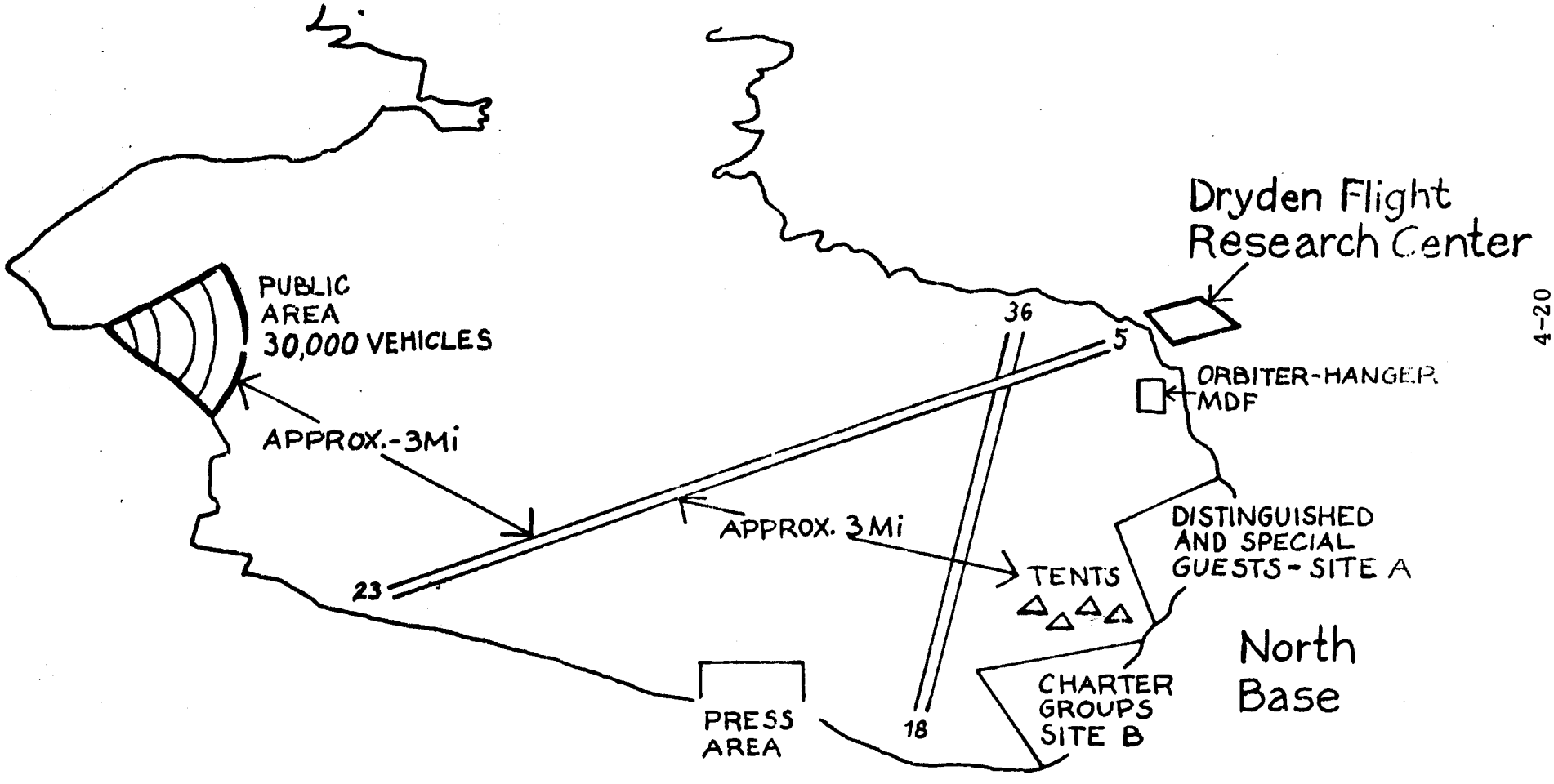
c. Various ambulance services for off-base have been arranged by law enforcement agencies.

d. The California Air National Guard will provide first aid facilities for on-base.

e. Various off-base ambulance services will provide support on-base prior to and during landing.

f. The Southern California Auto Club will provide tow trucks to move owners disabled vehicles at owners expense.

VIEWING SITE LOCATIONS
DFRC, EDWARDS, AFB



4-20

Not to scale

4.10 CONTINGENCY PLANNING FOR USE OF WSMR DISTINGUISHED GUESTS (Abort Once Around (AOA))

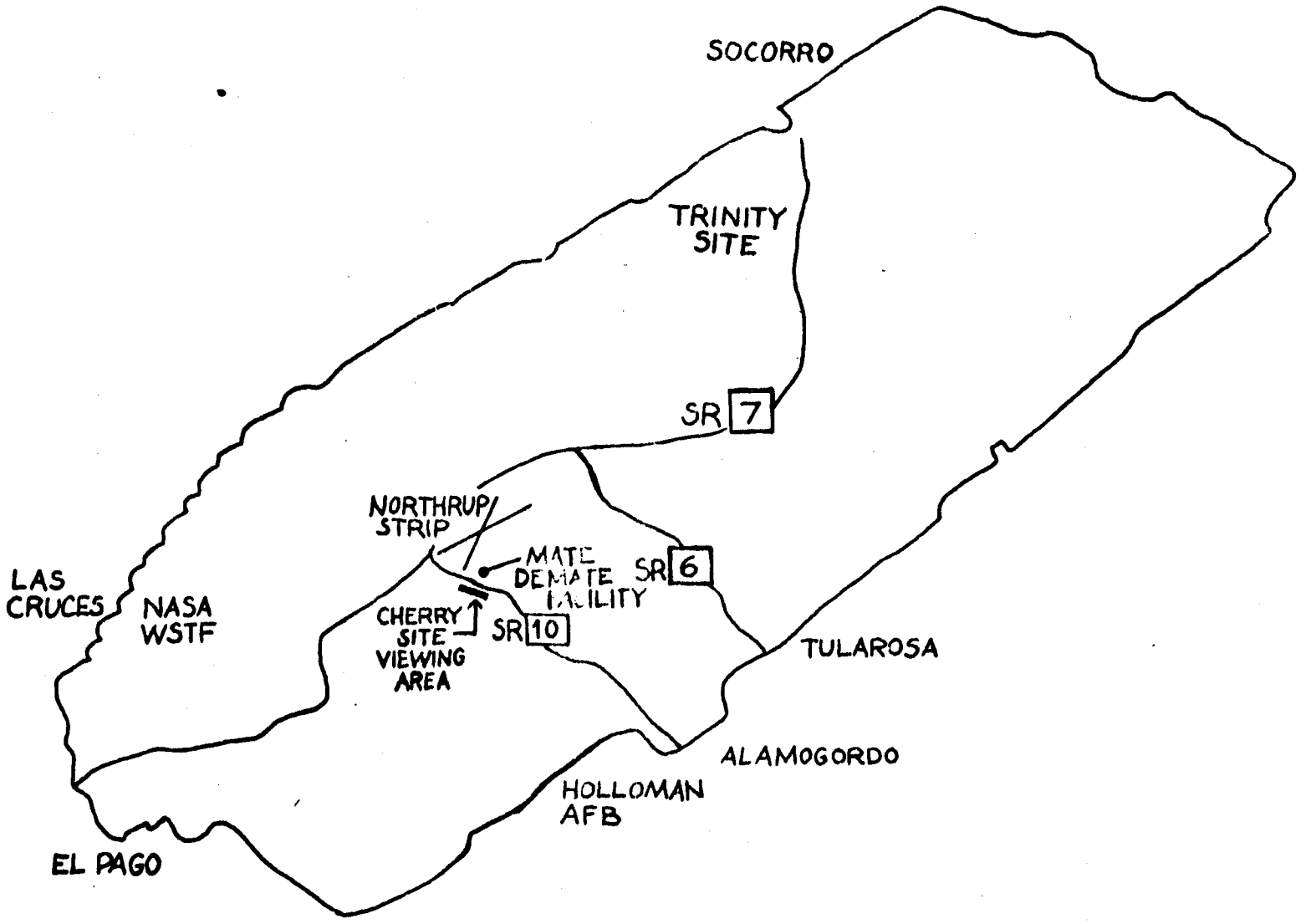
In the event of an Abort Once Around (AOA), NASA's distinguished guests will be flown back to Washington at the earliest possible opportunity following conclusion of the mission.

GENERAL PUBLIC

There will be no opportunity to arrange for public viewing of the landing. If conditions permit, arrangements will be made for the general public to see the OV-102 parked on Northrup Strip, near the Cherry site the day following landing.

WSMR will provide NASA with an estimated cost figure for minimum requirements at the Shuttle viewing site, which includes water, sanitary facilities, necessary directional signs.

Abort Once Around
Public Viewing
White Sands Missile Range



4.11 END OF MISSION (EOM)

Between 125-150 distinguished guests will arrive at Holloman in advance of the landing. Bus transportation will be provided to move these visitors either to and from Holloman to viewing site or from Holloman to motel or guest quarters on base.

Because of its proximity to Holloman, the Administrator's distinguished guests will stay at a motel in Alamogordo. Adequate lodging will be available because most press and NASA employees are staying in Las Cruces.

Most special guests, including those in special groups, will stay in the El Paso area because of the international airport, Biggs Field and the almost unlimited motel and hotel accommodations.

With at least 30 days notice, a Guest Services Center will open three days prior to the scheduled landing at a yet-to-be determined location in El Paso.

The functions and staffing will be similar to the Lancaster guest operation. Special guests will check into the Guest Center where they will be badged and instructed to board charter buses the morning of the landing.

4.11.1 (EOM) LANDING VIEWING SITES

Distinguished and Special Guest Viewing Site

Guests of the Administrator and special guests will be transported by bus from Alamogordo and the El Paso Guest Services Center to a viewing site located at Northrup Strip. This site will be limited to 2,000 guests, and will provide such services as mission commentary, drinking water, comfort stations, traffic control, and medical. Parawings equipped with NASA audio-video release will be provided.

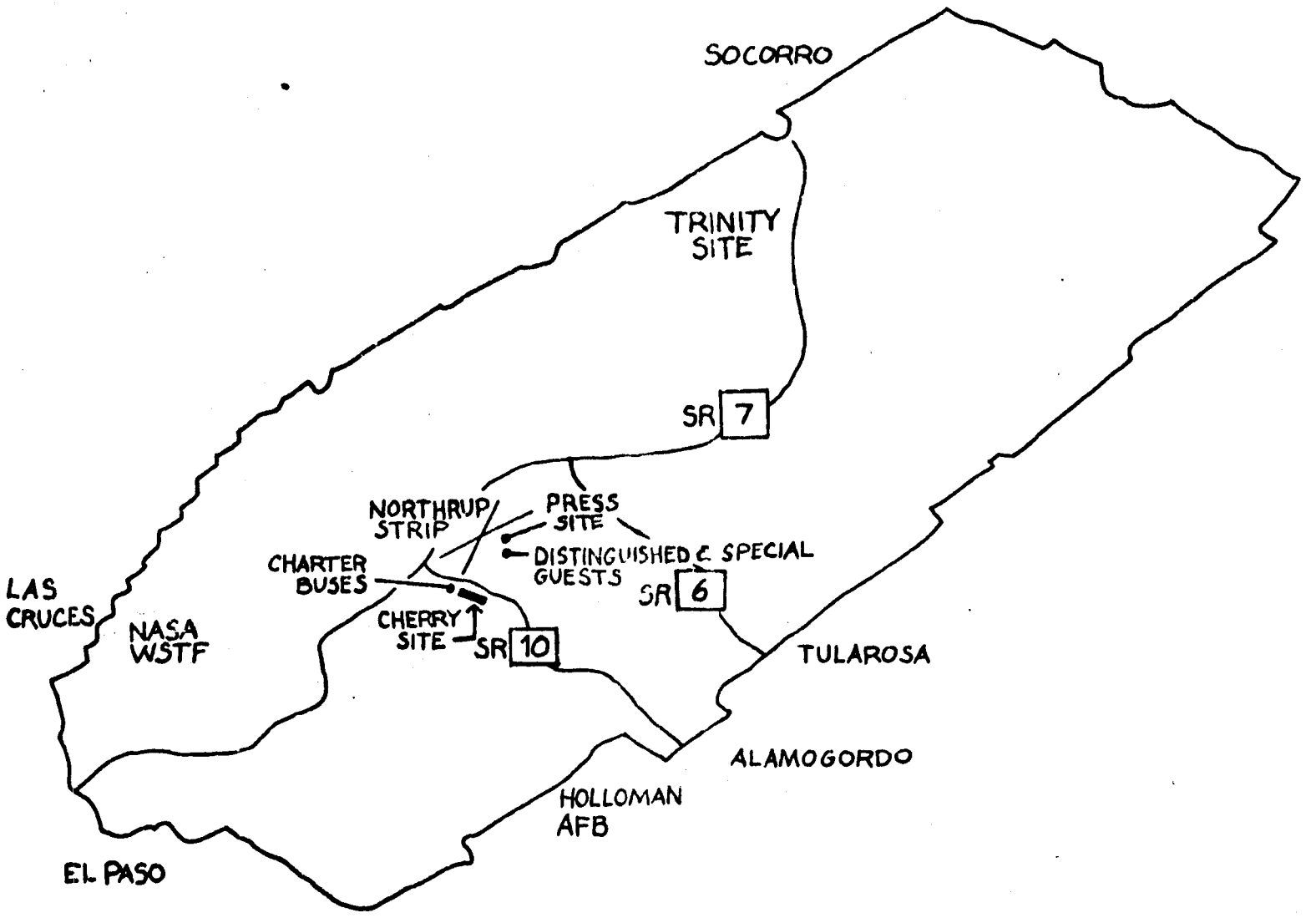
Special - Contractor

Contractor and institutional groups, providing their own bus transportation, will observe the landing from Cherry site located near the distinguished and special guest viewing area along Highway 10. Mission commentary, drinking water and portable comfort stations will also be available at this site.

General Public

It will not be possible to accommodate individuals in their own vehicles. The general public will have the opportunity to drive to WSMR the day following landing and board shuttle buses furnished by the U.S. Army to view "Columbia" at a site along Highway 10. This is the same viewing area which will be used by groups providing their own bus transportation for the landing a day earlier.

End of Mission
Viewing Site Locations
White Sands Missile Range



4.11.2 LOGISTICS

These requests will be met by WSMR with NASA reimbursement:

1. **Ropes and stanchions as necessary between distinguished, special and other groups.**
2. **Security and crowd control for parking.**
3. **NASA Administrator will require a mobile telephone.**
4. **Commercial food and beverage service will be available at viewing sites.**

4.11.3 VIEWING OF ORBITER CRAFT ON GROUND DAY FOLLOWING EOM

Requirements will be the same as for Abort Once Around (AOA).

4.12 PROPOSED SCHEDULE FOR DISTINGUISHED GUESTS LAUNCH AND NOMINAL LANDING

T-1 Day	1:00 p.m.	Distinguished guests (Administrator's, Congressional, International) depart Andrews AFB in one or two charter craft. Lunch served en route.
	3:00 p.m.	Arrive Space Shuttle Landing Facility. Board buses for drive to Ramada Inn at Titusville (intersection of I-95 & SR-50.)
	3:30-6:00 p.m.	Free Time
	6:15 p.m.	Depart Ramada Inn for Visitor Information Center
	6:30-8:00 p.m.	Administrator's Reception & Buffet Dinner
	8:00-8:30 p.m.	OV-102 briefing
	8:30 p.m.	Board buses for night view of launch pad
	8:50 -9:05 p.m.	View OV-102 on launch pad
	9:05-9:35 p.m.	En route to Ramada Inn
T Day (Launch)		
	4:30 a.m.	Wake up call
	5:00-5:30 a.m.	Buffet breakfast
	5:45 a.m.	Depart motel for Launch Control Center (LCC) - Firing Room #4
	6:30 a.m.	Arrive LCC
	6:50 a.m.	Guests will be able to watch the launch through the glass of the LCC, or leave about ten minutes prior to liftoff and observe it from the roof of the LCC.
	7:00 a.m.	Liftoff
	7:30 a.m.	Depart LCC for tour of KSC

(T Day (Launch) cont.

	7:30-9:30 a.m.	Tour of KSC and Cape Canaveral Air Force Station
	9:45 a.m.	Plane departs with those returning to Washington, DC
	10:00 a.m.	Second plane departs for Ellington AFB
	11:30 a.m., CT	Arrive Ellington AFB. Depart for motel. (Location to be determined.)
	12:30 p.m.	Lunch at motel.
	2:00 p.m.	Depart motel for Mission Control Center (MCC) and receive up-date on mission status.
	3:00 p.m.	Leave MCC for motel.
	6:30 p.m.	Reception and dinner hosted by Administrator and Dr. Kraft.
T + 1 Day	10:30 a.m.	Depart motel. Tour of Johnson Space Center and leave for Ellington AFB.
	12:00 Noon CT	Depart Ellington AFB, lunch enroute.
	1:00 p.m., PT	Arrive U.S. Air Force Plant 42, Palmdale, CA. Board buses for Antelope Valley Inn.
	6:00 p.m.	Reception and briefing in Sierra Centre of Antelope Valley Convention Center .
T+2 Days	6:00-7:00 a.m.	Buffet breakfast in Antelope Valley Inn.
	7:00 a.m.	Board buses for drive to DFRC.
	8:00 a.m.	Arrive North Base— Distinguished Guest Viewing Site.
	8:30 a.m.	Observe OFT 1 landing.

T+2 Days (cont.)

9:00-10:00 a.m.	Brief tour of DFRC and Edwards AFB.
10:15 a.m.	Board aircraft at Edwards for return to Washington. Lunch served enroute.
5:30 p.m., ET	Arrive Andrews AFB.

4.13 PRESIDENTIAL INTEREST/PARTICIPATION

The NASA audio and video release will be provided to the White House.

4.14 OTHER GUEST ACTIVITIES

Anticipated staffing requirements to support guest operations for launch and landing will leave no experienced protocol personnel in Washington.

Other guest activities at Headquarters and field centers could be offered which would make use of the NASA audio and video release.

The foregoing protocol plan, however, uses NASA's Public Affairs talent completely and thus no Public Affairs personnel are available to plan and conduct localized activities.

First Launch of
The Space Shuttle

Special Viewing Site Guest Information

First Launch of
The Space Shuttle

Guest Information Map

map

NASA

John F. Kennedy Space Center

4-30

First Launch of
The Space Shuttle

Public Viewing Site

NASA

Vehicle Permit No. _____

National Aeronautics and
Space Administration

John F. Kennedy Space Center

First Launch of
The Space Shuttle

Public
Affairs

NASA

Display in windshield with this side showing in vehicle.

This permit authorizes the bearer and vehicle occupants to enter Kennedy Space Center, Fla., by either Gate # 1 (South entrance to CCAFS), Gate # 2 (Merritt Island State Road 3) or Gate = 3 (U.S. 1 and State Road 405) [redacted]

No pets are allowed on Kennedy Space Center or Cape Canaveral Air Force Station.

WARNING

U.S. Government Property, issued for official use until completion of operation. Use or possession by an unauthorized person, counterfeiting or alteration is a violation of Section 499, Title 18, U.S. Code and will make the offender liable to penalty. This permit may be kept as a souvenir.

Richard G. Smith, Director

4-31

National Aeronautics and Space Administration

John F. Kennedy Space Center

Welcome to the first flight of the Space Shuttle "Columbia." This credential is issued for the sole, exclusive and personal use of the bearer and is not transferable. It may be kept as a sourvenir after the test flight.

Richard G. Smith, Director

5.0 EDUCATION PLAN

5.1 FOREWORD

The primary purpose of the educational operation is to disseminate information relating to STS-1 in an educational format, as widely as possible, to the educational community, and to build a sound educational base for future STS missions, payload activities, and their scientific enchancement.

In accomplishing this purpose NASA Community and Education Services will concentrate on new educational targets. These targets will include educational groups and individuals who are not current users of or not aware of NASA educational services. Because of the nature of NASA educational programs and its ongoing programs, this plan includes projects and activities beyond the STS-1 mission.

5.2 MAJOR OBJECTIVES

NASA Community and Education Services in connection with STS will:

- Provide educational activities and programs to make the educational community aware of the Space Transportation System, its potential, and its impact on students and teachers;

- Provide resources to incorporate the Space Transportation System concepts and payload results into current curricula which are impacted by NASA;

- Develop new materials of instruction related to the Space Transportation System and its upcoming payloads;

- Conduct conferences for professional educators in connection with STS-1 launch and landing;

- Use all current existing educational programs (Spacemobile, teacher workshops, etc.) to relate information on Space Transportation System and its payloads.

5.3 MAJOR GOALS

The NASA education plan for STS-1 was developed to accomplish the following educational goals:

- To provide students and teachers with guided experiences which will not only inform but help them understand STS-1;

- To familiarize teachers with materials, resources, and teaching techniques needed for the effective introduction of STS-1 operations in the classroom;

- To encourage teachers to capitalize on the contemporary interest of children in the STS-1;

- To stimulate the spirit of inquiry essential to the education process;

- To provide information on several facets of the STS and their relationship with educational concepts being taught in the classroom;

- To motivate teachers to use the information, experience, and materials acquired to enrich their classroom curricula.

This plan is divided into three parts: (1) those activities associated with STS-1; (2) educational and curriculum materials to be developed for use during STS-1 and follow-on STS missions and (3) utilization of current educational programs during the Shuttle era.

5.4 LAUNCH AND LANDING CONFERENCES

NASA Community and Education Services will conduct education conferences for STS-1 launch and landing. The Center Educational Programs Officers (CEPO's) from KSC, MSFC, JSC, and Bill Nixon, NASA Headquarters, will be the program committee and will establish details and logistics of the conference for all NASA invited educators. The conference, in conjunction with launch, will be conducted T-1 at Central Florida University. Ray Corey, CEPO, KSC, is Chairman of the planning committee for launch programs.

A Landing Conference will be conducted (T+1) at JPL. Jim Poindexter, JSC Educational Programs Officer, will be Chairman of the planning committee for landing programs, and will be assisted by Benito Casados, JPL.

Categories of guests for conferences and viewing will include:

- Headquarters distinguished invitees - 150 total (3 buses)

- Educator groups with car or bus passes - estimate 25 buses

- Student groups will receive car/bus pases. (It may be necessary to limit the number of these groups - student groups will view launch and landings only)

- 1980 NASA International Science and Engineering Fair winners and their teachers will attend Educator Landing Conference - 20

Each Center Educational Programs Officer:

- Will submit distinguished educator names to Bill Nixon, NASA Headquarters, for invitation to STS-1. Transportation limits to 150 educators for launch program (KSC) and each landing progrm at DFRC.

- Will be responsible for identifying educator groups in his region coming to KSC for launch and coordinating

with Ray Corey; likewise, conferences coinciding with STS-1 landing will be coordinated with Jim Poindexter.

- Will forward requests from educators for vehicle passes (car and bus) with recommendation to Bill Nixon for coordination with Protocol Office.

General student groups will be limited to the viewing opportunity and the activities at KSC-VIC which are available to the public.

The program planning committee will make all arrangements for one central educational conference program to be conducted T-1 at Central Florida University and T+1 at JPL. They will also be responsible for arranging tour activities at KSC and DFRC. These activities will be coordinated with Center PAO's 10 days in advance.

Staffing for Educational Conferences will be assigned from Education Working Group Members, Center Educational Programs Officers, and Aerospace Education Specialists. Escorts for tours at KSC and DFRC will be coordinated with the Protocol Office.

5.4.1 EDUCATION CONFERENCE CONTENT

The one day Education Conference is designed to give participants (1) in-depth knowledge of STS-1 mission; (2) future STS mission payloads; (3) an awareness of NASA Educational Programs Services and materials available to educators; (4) knowledge and motivation to enrich educational curriculums with STS and payload concepts. Presentations will be made by knowledgable NASA personnel in the following areas:

- STS-1 Vehicle and Payloads
- STS-1 Mission Profile
- Upcoming STS Payload (Spacelab - Space Telescope)
- NASA Education Programs and Services
- NASA Space Shuttle Student Program
- Current NASA educational materials will be displayed, previewed and distributed

5.5 CONTINGENCIES

If launch is delayed or postponed three days in advance of schedule, conference will be rescheduled and night letter will be sent informing invited guests.

If launch is delayed or postponed after guests have arrived on site, conference will be held as scheduled.

If landing site is changed to White Sands thirty days prior to launch, the education conference will be shifted to the White Sands vicinity. If changed less than thirty days, conference will be held as scheduled at JPL and landing will be observed on large screened television by conference participants.

5.6 NEW EDUCATIONAL MATERIALS

A special NASA publication on STS will be produced for distribution in response to educational inquiries. This publication will be 4-6 pages, black and white, covering STS and operational missions. This should be the official publication for all invited guests and be coordinated with the Protocol Office. Responsibility for the publication is assigned to JSC for writing and camera ready copy. Headquarters will print. (FY '81 funding).

5.6.1 SPECIAL PUBLICATIONS

A special NASA publication on STS will be produced for distribution in response to educational inquiries. This publication will be 4-6 pages, black and white, covering STS and operational missions. This should be the official publication for all invited guests and be coordinated with the Protocol Office. Responsibility for the publication is assigned to JSC for writing and camera ready copy. Headquarters will print. (FY '81 funding).

5.6.2 BULLETINS

A one-page bulletin (front and back) will be issued to educational mailing list following STS-1 mission. This bulletin will be result-oriented with preliminary engineering and scientific findings of the STS-1 mission. Headquarters Community and Education Branch has the responsibility of writing, printing and distribution of this bulletin. (FY '81 funding)

5.6.3 LITHOGRAPHS

Community and Educational Programs will produce a series of STS related lithographs for distribution during the STS-1 mission. (FY '81 funding)

5.6.4 TELEVISION - COMMUNICATION

An Audio-Visual Education Committee will be established for the purpose of evaluating on-board video and film of STS-1 for educational needs and possible incorporation as curriculum material. This committee will make contacts with PBS and instructional TV stations to make them aware of these materials. This committee will establish an effective delivery system which will permit a quick exchange of video materials between STS and the educational community. On future missions this committee will recommend audio-visual coverage of payload experiments and be responsible for editing and planning educational distribution. This committee will coordinate all activities with the Telecommunications Working Group.

5.6.5 AEROSPACE EDUCATION SERVICES PROJECT (SPACEMOBILE)

Concepts relating to STS and its upcoming payloads are a focal point of the general AESP presentation during academic year '80 - '81. A new Shuttle orbiter model with Spacelab in bay and manipulator arm (1/50 scale) has been added to the AESP equipment and is used with other STS visual material. The AESP Specialist will also be responsible for the distribution of STS publications and curriculum materials to teachers and libraries in the schools they are visiting.

5.6.6 TEACHER WORKSHOPS

Materials and information concerning STS-1 will be emphasized in aerospace teacher workshops in the summer programs of 1980. AESP Specialists were made aware of existing STS materials, teacher activities and received presentations on upcoming STS payloads as part of the December 1979 AESP Training Conference held at Oklahoma State University.

5.6.7 PLANETARIUM AND SCIENCE CENTERS

All current information relating to STS flights will be mailed to the 650 planetariums and science centers on the Headquarters mailing list.

5.6.8 NASA REPORT TO EDUCATORS

A major article will be published in the fall 1980 issue of NASA Report to Educators discussing the STS-1 mission. This quarterly report reaches up to 55,000 educators on the NASA mailing list.

5.6.9 TEACHER RESOURCE ROOMS

As a service to teachers, curriculum supervisors, and others in related fields, the NASA Teacher Resource Rooms will provide an easily accessible source of materials on the STS for use in the classroom. The services offered are:

- Slide Library
- Slide Copier
- Film Library
- Audio Tape Library
- Record Library
- Reference Book Library
- Lesson Plan Collection
- Literature and Publications
- Film Strip and Slide Cassette Programs

Teacher Resource Rooms are in operation at LeRC, MSFC, and KSC. Announcement of these services will be made in the NASA Report to Educators and by Spacemobile personnel in their daily encounters with educators.

5.6.10 EDUCATIONAL EXHIBIT

An up-to-date exhibit displaying NASA Community and Education Services available is scheduled in eight national educational conventions in 1980. A video tape informing participants of STS will be part of this exhibit and STS publications will be distributed by the NASA representatives at the exhibit booth.

5.7 INTERFACES AND STAFFING

It is the responsibility of the chairperson of the Education Working Group to coordinate all educational activities with the chairperson of all other working groups. Each Center Educational Programs Officer will coordinate all educaton activities with the Center PAO. NASA installations that do not have a Center Educational Programs Officer (CEPO) will coordinate with the CEPO that has the regional responsibility.

5.7.1 STAFFING STS EDUCATIONAL ACTIVITIES

Each Center Educational Programs Officer (CEPO) will be responsible for implementing all STS activities as outlined in their regional area.

Curtis Graves-Chairman - Chief, Community & Education Services Branch,NASA Headquarters

Garth Hull-ARC (Northern Region)
Mike Donahoe-ARC (Southern Region)
Elva Bailey-GSFC
Ray Corey-KSC
Harold Mehrens-LaRC
James Poindexter-JSC
Harrison Allen-LeRC
Jimmy Pruitt-MSFC

STAFFING STS-1 LAUNCH CONFERENCE - KSC

Ray Corey-Chairman, KSC
Jimmy Pruitt-MSFC
William Nixon-HDQS
Assisted by AESP Specialist as assigned

STAFFING STS-1 LANDING CONFERENCE - JPL

James Poindexter-Chairman, JSC
Benito Casados-JPL
Mike Donahoe-ARC
William Nixon-HDQS
Assisted by AESP Specialist as assigned

STAFFING AUDIO-VISUAL EDUCATION COMMITTEE

Jimmy Pruitt-Chairman, KSC
James Poindexter-JSC
John Bluck-LeRC

National Aeronautics and
Space Administration

Washington, D.C.
20546

Office of the Administrator

MAR 9 1979

TO: All Headquarters Associate Administrators
All Center Directors

FROM: A/Administrator

SUBJECT: Public Affairs Resource Requirements for Shuttle OFT

As we approach the first orbital flight test of the Space Shuttle, NASA's Public Affairs responsibilities and opportunities will increase considerably. It will be necessary, for example, to conduct three news operations simultaneously at widely separated locations during orbital flight tests, and major visitor programs are contemplated at both launch and landing sites.

In this situation, Public Affairs activities at the three Centers primarily concerned (Dryden, Johnson and Kennedy) will be closely coordinated by the Director of Public Affairs, Bob Newman. Additional support and assistance may be required from other Centers and Headquarters Program Offices. I will appreciate very much your giving our Public Affairs Director and his coordinators your full support and assistance as they call on you.

Original Signed By
Robert A. Frosch
Robert A. Frosch

DISTRIBUTION

Headquarters Associate Administrators

B/Mr. William E. Lilly
E/Dr. Anthony J. Calio
L/Mr. Arnold W. Frutkin
M/Mr. John F. Yardley
N/Mr. Ray Kline
R/Dr. James J. Kramer
S/Dr. Noel W. Hinners
T/Dr. William Schneider

Center Directors

ARC/DD/Mr. C. A. Syvertson

DFRC/OD/Mr. Isaac T. Gillam IV

GSFC/100.0/Dr. Robert S. Cooper

JPL/180.905/Dr. Bruce C. Murray

JSC/AA/Dr. Christopher C. Kraft, Jr.

KSC/CB/Mr. Lee R. Scherer

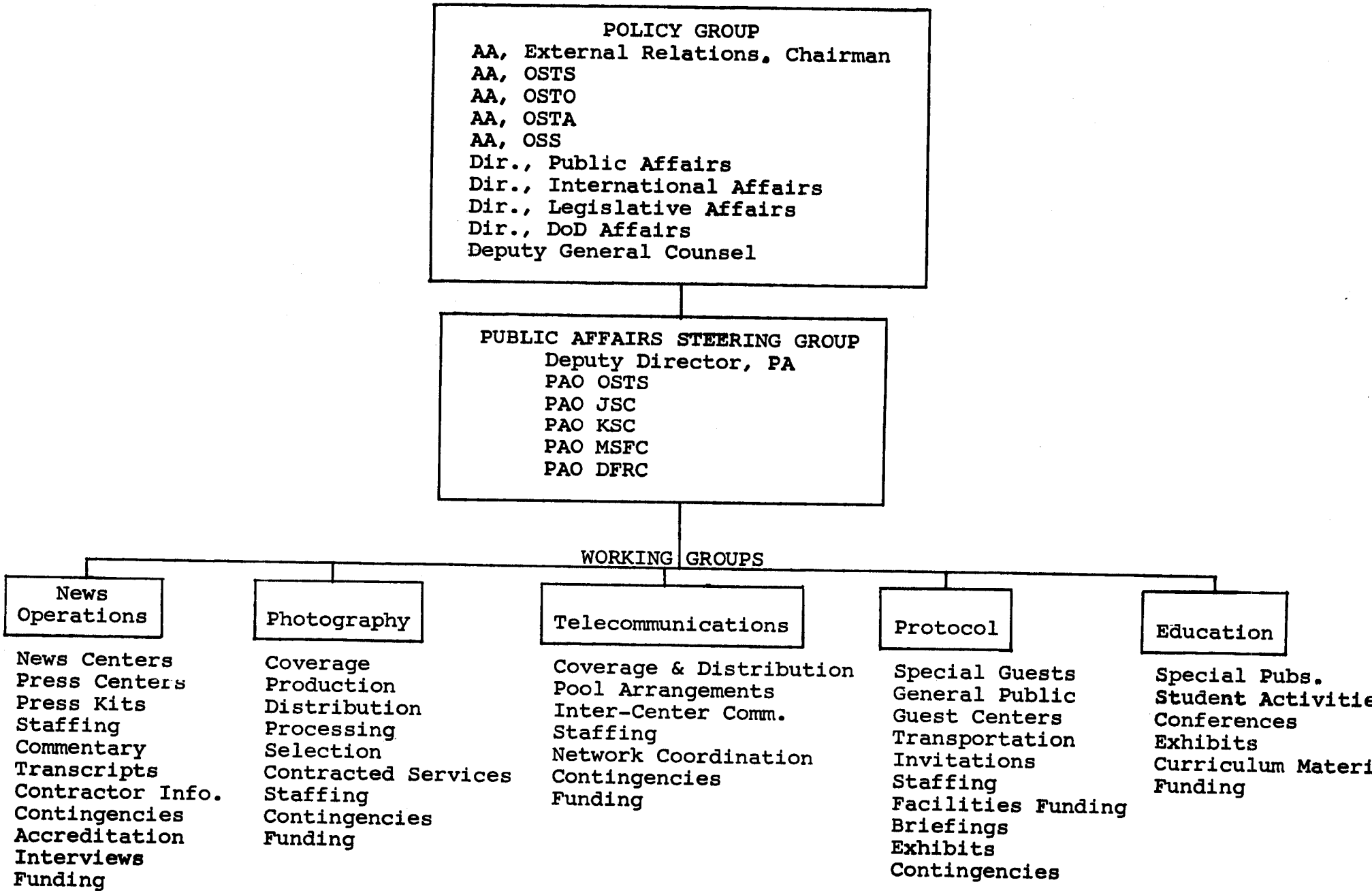
LaRC/106/Mr. Donald P. Hearth

LeRC/0100/Dr. John F. McCarthy, Jr.

MSFC/DA01/Dr. William R. Lucas

WFC/OD/Mr. Robert L. Krieger

STS-1 PUBLIC AFFAIRS PLANNING



STS-1 PUBLIC AFFAIRS PLANNING

POLICY GROUP

R. Allnutt (Acting)	- AA, External Affairs
J. Yardley	- AA, OSTS
G. Lunney (Acting)	- AA, OSTO
A. Calio	- AA, OSTA
T. Mutch	- AA, OSS
Vacant	- Dir., Public Affairs
K. Pederson	- Dir., International Affairs
T. Finn	- Dir., Legislative Affairs
F. Simokaitis	- Dir., DoD Affairs
J. Mossinghoff	- Dep., General Counsel

PUBLIC AFFAIRS STEERING GROUP

R. Shafer	- Dep. Dir., Public Affairs
D. Garrett	- PAO, OSTS
H. Stall	- PAO, JSC
C. Hollinshead	- PAO, KSC
J. Jones	- PAO, MSFC
R. Jackson	- PAO, DFRC

WORKING GROUPS

NEWS OPERATIONS

M. Waggoner	- HQ, Ch.
J. McLeaish	- JSC
H. Harris	- KSC
J. Taylor	- MSFC
R. Jackson	- DFRC

PHOTOGRAPHY

L. Gaver	- HQ, Ch.
W. Robbins	- JSC
E. Harrison	- KSC
C. Hunt	- MSFC
L. Montoya	- DFRC

TELECOMMUNICATIONS

R. Shafer	- HQ, Ch.
W. Robbins	- JSC
G. Cottee	- KSC
C. Hunt	- MSFC
R. Jackson	- DFRC

PROTOCOL

G. Marianetti	- HQ, Ch.
C. Biggs	- JSC
W. Taylor	- KSC
E. Schorsten	- MSFC
R. Jackson/ W. Painter	- DFRC
TBD	- CODE C
TBD	- CODE I

EDUCATION

W. Nixon	- HQ, Ch.
J. Poindexter	- JSC
R. Corey	- KSC
J. Pruitt	- MSFC
B. Casados	- JPL/DFRC